

COUNTY BOROUGH OF BOOTLE.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR
1937.

F. T. H. WOOD, O.B.E., M.D. (Lond), B.S., B.Sc., D.P.H.

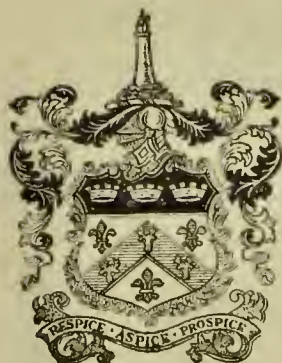
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Officer to the Public Assistance Committee, etc.**

BOOTLE:

BOOTLE TIMES, LTD., 30, ORIEL ROAD.

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BOOTLE TOWN COUNCIL, 1936-1937.

†*HIS WORSHIP THE MAYOR (MR. COUNCILLOR BURNIE, J.P.).

*MR. ALDERMAN CLARK, J.P.	MR. COUNCILLOR DUNN.
MR. ALDERMAN CULLEN.	MR. COUNCILLOR HACKETT.
MR. ALDERMAN HAWORTH, J.P.	§*COUNCILLOR DR. HARRIS, J.P.
MR. ALDERMAN JONES, J.P.	*MR. COUNCILLOR HARRISON.
*MR. ALDERMAN KEENAN.	†*MR. COUNCILLOR HOLDEN.
MR. ALDERMAN D. J. KELLY.	MR. COUNCILLOR F. HUGHES.
MR. ALDERMAN J. S. KELLY.	*MR. COUNCILLOR W. E. HUGHES.
† §*MR. ALDERMAN KINLEY.	†MR. COUNCILLOR KENNEDY.
MR. ALDERMAN MAGUIRE, J.P.	MR. COUNCILLOR McLAREN.
†*MR. ALDERMAN MAHON, J.P.	MR. COUNCILLOR McNEILL.
MR. ALDERMAN O'NEILL, J.P.	§*MR. COUNCILLOR MAHON.
MR. ALDERMAN SMITH, J.P.	MR. COUNCILLOR MARSH.
MR. COUNCILLOR ABBOTT.	MR. COUNCILLOR MONKS.
MR. COUNCILLOR ANDERSON.	MR. COUNCILLOR PATRICK.
MR. COUNCILLOR ATHERTON.	†MR. COUNCILLOR RAINFORD, J.P.
†MR. COUNCILLOR D. B. BLACK.	MR. COUNCILLOR RILEY, J.P.
MR. COUNCILLOR R. A. BLACK.	†MR. COUNCILLOR ROBINSON.
§*COUNCILLOR DR. BROWN.	MR. COUNCILLOR ROGERS.
MR. COUNCILLOR CAIN.	MR. COUNCILLOR SKILLING.
MR. COUNCILLOR CAMPBELL.	MR. COUNCILLOR SMALL.
†MR. COUNCILLOR CLEARY.	§MRS. COUNCILLOR SMITH, J.P.
†MR. COUNCILLOR M. CONNOLLY.	MR. COUNCILLOR SPENCE, J.P.
†*MR. COUNCILLOR T. CONNOLLY.	MR. COUNCILLOR WEBSTER, J.P.
†*MR. COUNCILLOR CULLEN.	MR. COUNCILLOR WILLIAMS.

* Member of Health Committee.

§ Member of Maternity and Child Welfare Sub-Committee.

† Member of Housing and Town Planning Committee.

HEALTH COMMITTEE.

Chairman—COUNCILLOR DR. HARRIS.

Deputy Chairman—MR. ALDERMAN KINLEY.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Chairman—MRS. COUNCILLOR SMITH.

Deputy-Chairman—COUNCILLOR DR. HARRIS.

This Committee consisted of members of the Health Committee (as indicated), together with co-opted members as follows:—

MRS. WEIR; MRS. GRANT.

HOUSING AND TOWN PLANNING COMMITTEE.

Chairman—MR. ALDERMAN MAHON.

Deputy-Chairman—MR. COUNCILLOR CLEARY.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health, School Medical Officer, Administrative Tuberculosis Officer, and Medical Superintendent of the Corporation Hospitals—

F. T. H. WOOD, O.B.E., M.D., B.S., B.Sc. (Lond.), D.P.H. (Durh.).

Deputy Medical Officer of Health and Deputy School Medical Officer—

G. J. ROBERTS, M.D., Ch.B. (Edin.), B.Sc. (Wales), D.P.H. (from 1st April 1937).

Tuberculosis Officer and Medical Officer of Isolation Hospital—

R. HANNAH, M.C., M.B., Ch.B. (Edin.), D.P.H.

Assistant Medical Officers of Health and Assistant School Medical Officers—

Miss M. B. CLARKE, M.B., Ch.B., D.P.H. (Liverpool).

G. P. McCLOSKEY, M.B., B.Ch., B.A.O. (Belf.), D.P.H. (resigned 31st March 1937).

J. V. WALKER, M.B., Ch.B. (B'ham), M.R.C.P. (Lond.), D.P.H. (from 1st June 1937).

School Dental Surgeons—

H. B. DAWES, L.D.S. E. G. O'SHEA, B.D.S.

Corporation Hospital, Linacre Lane.

*Matron—*Miss S. L. BEVAN.

Maghull Sanatorium.

*Matron—*Miss E. HOLDEN, R.R.C.

Maternity Home.

*Matron—*Miss M. W. CLEARY.

Chief Sanitary Inspector, Inspector under the Food and Drugs Acts, and the Housing Acts, etc.—

W. ROBSON.

Sanitary Inspectors—

12B. J. HOLDEN. 12W. E. LEATHER. 12I. WILLIAMS. 123E. E. JONES.

Clerical Staff—

H. A. BROWN, O.B.E. Miss WILSON. Miss BROWN. Miss THOMPSON. Miss MAXWELL,
Miss GREEN. Miss SMITH. Miss MULHALL, Miss COOKE, Miss GEORGE,
Miss HALPIN, Miss OLIVER, E. A. PRESTON.

*Chief Clerk and Vaccination Officer—*N. LOCKWOOD.

Health Visitors—

456Mrs. MEREDITH.

456Miss F. M. HUGHES.

458Miss STARK.

14578Miss SKINNER.

458Miss WILD.

458Miss LYNCH.

458Miss ROBERTS.

458Miss COUNIHAN.

458Miss G. WILLIAMS.

School Nurses—

8Miss A. HUGHES.

8Miss THOMAS.

8Miss DAVIES.

8Miss C. HUGHES
(Orthopaedics).

*Tuberculosis Nurse—*8Miss KELLY.

Part-time Officers.

<i>Medical Officer, Ante-Natal Clinic</i>	P. MALPAS, F.R.C.S.
<i>Medical Officer, Maghull Sanatorium</i>	A. HENDRY, M.D.
<i>Medical Officers, Venereal Diseases Clinic .</i>	{ W. L. WEBB, M.B., Ch.B.
	{ Miss R. NICHOLSON, M.B., D.P.H.
<i>Ophthalmic Surgeon</i>	E. ALLAN, M.B., Ch.B.
<i>Throat Surgeon</i>	C. YORKE, F.R.C.S.
<i>Orthopaedic Surgeon</i>	B. L. McFARLAND, M.D.
<i>Medical Officer, Aural Clinic</i>	I. A. TUMARKIN, M.B., Ch.B., F.R.C.S.
	{ A. W. HANLON, M.R.C.S., L.R.C.P.
<i>Public Vaccinators</i>	{ A. V. GLENDENNING, M.B., Ch.B., D.P.H.
<i>Pathologist</i>	Professor H. D. WRIGHT.
<i>Analyst</i>	Professor W. H. ROBERTS.
<i>Veterinary Surgeon</i>	HENRY SUMNER, M.R.C.V.S.
<i>Rat Officer</i>	W. BORROWS.

1Certified Sanitary Inspector. 2Certified Inspector of Foods. 3Certified Smoke Inspector.
4Certified Health Visitor. 5Certified Midwife. 6Half-time Tuberculosis Visitor.

7Assistant Inspector of Midwives. 8Trained Nurse.

HEALTH DEPARTMENT,

TOWN HALL, BOOTLE.

May 1938.

*To the Mayor, Aldermen and Councillors
of the County Borough of Bootle.*

Mr. Mayor, Mrs. Councillor Smith, and Gentlemen,

I have the honour to present the sixty-fifth Annual Report on the work of the Health Department.

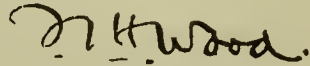
Attention may be directed to the following features of interest during the year.

- (1) A persistence of the relatively high birth rate of the Borough at 22·0 per 1,000 of the population, a rate 42 per cent. in excess of that returned for England and Wales.
- (2) A fall in the death rate to 12·8 per 1,000 of the population, a figure which has been bettered only in 1924 and 1930.
- (3) A rise in the infant mortality rate from the low record of 68 per 1,000 births in 1936 to 77 per 1,000 births.
- (4) A decrease in the death rate from all forms of tuberculosis to 1·1 per 1,000 of the population, being a continuance of the slow improvement in this regard.
- (5) An occurrence of a small outbreak of paratyphoid fever in the first quarter, and a high incidence of diphtheria and scarlet fever in the last quarter of the year.
- (6) The institution of a Municipal Midwifery Service which is proving highly acceptable to the mothers of the Borough.
- (7) An expansion of the other Maternity and Child Welfare Services to meet the position that the high birth rate of the Borough requires health services for mothers, infants, and school children as extensive as those required by an area of 110,000 population having the national standard of birth rate.

I have pleasure in recording my indebtedness to the Chairman and members of the Health Committee for the sympathetic reception given to recommendations made for the maintenance and development of public health work in the Borough, and in acknowledging the continued good service of my colleagues in the Department.

I have the honour to be,

Your obedient servant,

A handwritten signature in dark ink, appearing to read 'M. H. Wood'. The signature is written in a cursive style with a large initial 'M' and a distinct 'H'.

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1937.

Population (Registrar-General's estimate) at mid-year 1937 ...	74,690
Area in Acres (exclusive of river bed)	1946·5
Population at Census of 1931	76,770

Census.	Per occupied dwelling.	
	No. of persons.	No. of families
1911	5·6	1·12
1921	5·6	1·17
1931	5·03	1·18

Inhabited houses (end of 1937) according to Rate Books ...	16,802
Uninhabited houses (end of 1937) according to Rate Books ...	266

	Total.	Males.	Females.		
Live Births—Legitimate ...	1,577	797	780		
Illegitimate ...	63	31	32		
Total ...	1,640	828	812	Birth Rate	22·0

Still Births, 69.	Rate per 1,000 total (live and still) births	40·4
Deaths	953	Death Rate 12·8

Number of women dying in, or in consequence of, childbirth—			
	Deaths	Rate per 1,000 total (live and still) births	

From sepsis	3	...	1·75
From other causes ...	3	...	1·75
Death Rate of Infants under one year of age per 1,000 live births—Legitimate, 77; Illegitimate, 95; ...	Total		77
Deaths from Measles (all ages) ... ..	...	...	4
Deaths from Whooping Cough (all ages) ...	...	...	8
Deaths from Diarrhoea (under 2 years of age) ...	...	...	13
Death Rate from Respiratory Tuberculosis per 1,000 ...	...	...	0·97
Death Rate from all forms of Tuberculosis per 1,000 ...	...	...	1·11
Natural increase of the population during the year ...	...	...	687
Number of deaths of Infants (under the age of one year) ...	...	...	127

The Rateable Value of the Borough as at 1st April 1937 was £516,942
The estimated product of a Penny Rate for 1937-38 £1,909
In 1937-38 the General Rate was 13/9d. in the pound (excluding water rate and charges).

The cost of the Health Services during 1937-38 was estimated at £35,721, equivalent to a rate of 1s. 6·72d. in the pound.

COUNTY BOROUGH OF BOOTLE.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

I.—VITAL STATISTICS.

Population. — At the Census in 1881 the population enumerated was 27,374; in 1891, 49,217; in 1901, 58,556; in 1911, 69,876; in 1921, 76,487; and in 1931, 76,770.

In May, 1938, the Registrar-General intimated that his estimate of population at mid-year 1937 was **74,690**, a decrease of 1,320 from the previous year, and this figure has been used in calculations of statistics throughout this report. It is, however, not easy to reconcile this estimate of a substantial reduction with the known facts that the annual number of births in the Borough has been virtually stationary for the last five years, that the excess of births over deaths last year was 687, and that the number of occupied houses increased by 65; the implication of a large excess of emigration over immigration is accordingly not securely based, and in view of the financial as well as statistical importance of accurate knowledge of the population of local government areas it seems very desirable that census enumerations should be undertaken at shorter intervals than ten years.

Births. — During the year there were registered 1,640 births to Bootle parents, representing a birth-rate of **22·0 per 1,000** of the population, that for England and Wales being 14·9. In 1936 the Bootle birth-rate was 22·2 and for the decennium 1927-1936 it was 22·2. There were 828 males and 812 females. It will be noted that the birth-rate, which reached a post-war maximum of 29·7 in the first quarter of 1920 has now become stabilised at about 22 per thousand. The national birth-rate, which has always been lower than that of Bootle, shows a small rise.

Period.	BOOTLE.		ENGLAND & WALES.
	Total Births.	Rate per 1,000.	Rate per 1,000.
1873—1880 ...	6,846	38·6	35·4
1881—1890 ...	15,508	36·8	32·4
1891—1900 ...	17,716	33·2	29·9
1901—1910 ...	20,468	32·3	27·2
1911—1920 ...	20,748	27·6	21·8
1921—1930 ...	18,884	22·8	18·4
1931 ...	1,667	21·6	15·8
1932 ...	1,768	22·9	15·3
1933 ...	1,652	21·4	14·4
1934 ...	1,644	21·4	14·8
1935 ...	1,636	21·4	14·7
1936 ...	1,688	22·2	14·8
1937 ...	1,640	22·0	14·9

It is clear, of course, that the crude birth-rate or ratio of births to population of all ages, although a convenient form of statement when the object in view is to record the aggregate effect of the various factors in reproduction, is not in itself an index of fertility inasmuch as the number of births depends mainly upon the number of married women at reproductive ages, and this number may vary at a different rate from that of the whole population. Accordingly a better realisation of variations of fertility is obtained by relating the number of legitimate births to the number of married women aged 15 to 45. Information as to the number of these is available at each census enumeration, and the figures calculated therefrom show that such a fertility rate in Bootle was 240 per 1,000 in 1911, 219 per 1,000 in 1921, and 181 per 1,000 in 1931.

The illegitimate births numbered 63, and were 3·8 per cent. of the total. In 1936 the total number was 50, and in 1935, 54.

Deaths.—The total number of deaths of Bootle residents during 1937, whether within or without the Borough, was 953; this figure includes 60 who died in institutions within the Borough, 421 who died in transferred institutions in Liverpool, 41 who died in hospitals outside the Borough, and 9 who died in mental hospitals, making a total

of 595 deaths in institutions. The death-rate for 1937 was, therefore, **12·8 per 1,000** of the population, as compared with 13·6 in 1936, and 12·8 in 1935.

The death-rate in Bootle for the decennium 1921-1930 was 13·5, and for 1911-1920, 17·1. The crude death-rate of the 125 great towns of England and Wales during 1937 was 12·5. The table below demonstrates the general downward trend of both national and local rates since the beginning of the century.

Period.	BOOTLE.		ENGLAND & WALES
	Total Deaths.	Rate per 1,000.	Rate per 1,000.
1873—1880 ...	3,823	21·7	21·2
1881—1890 ...	8,260	19·9	19·1
1891—1900 ...	10,942	20·6	18·2
1901—1910 ...	11,400	17·8	15·4
1911—1920 ...	12,470	17·1	14·3
1921—1930 ...	10,336	13·5	12·1
1931 ...	1,140	14·8	12·3
1932 ...	1,027	13·3	12·0
1933 ...	1,075	13·9	12·3
1934 ...	990	12·9	11·8
1935 ...	980	12·8	11·7
1936 ...	1,037	13·6	12·1
1937 ...	953	12·8	12·4

The death-rate during the first quarter of the year was 16·9, during the second, 10·9; the third, 9·9; and the fourth, 13·4.

The number of deaths which occurred in institutions was 595, *i.e.*, 62 per cent. of the total deaths, as compared with 58 per cent. in 1936, and 60 per cent. in 1935. The increasing use made of institutions for the accommodation of cases of terminal illness is illustrated by the above figure, which compares with a percentage of 29 in 1920.

Comparability of Crude Death Rates. — If the populations of all areas were similarly constituted as regards the proportions of their sex and age group components, their crude death rates (deaths per 1,000 population) could be accepted as valid comparative measures of the mortalities experienced by the several populations.

In practice, however, populations are not thus similarly constituted and their crude death rates fail as true comparative mortality indexes in that their variations are not due to mortality alone but arise also from differences in their population constitution, the two elements being combined in indistinguishable proportions. In order to isolate the mortality factor it is first necessary to identify and remove the population variable.

For this purpose the Registrar-General has supplied a "Comparability Factor" by which the crude death rate of the area should be multiplied in order to make it comparable, from a mortality point of view, with the crude death rate of the country as a whole or with the mortality of any other local area, the crude death rate of which should be similarly modified with its own factor for the purpose.

In the case of Bootle the comparatively youthful nature of the population results in the comparability factor being 1·18 with a rise in the adjusted death rate to 15·1. The standardised death rate based upon the constitution of the 1901 population as regularly used by the Registrar-General in his annual reviews is, however, 12·3, a lower figure than the crude death rate.

Mortality in Relation to Sex.—There were 497 deaths of males, and 456 of females. This represents a male excess mortality of approximately 18·8 per cent. after allowing for the smaller proportion of males in the population. The causes chiefly accounting for male excess are in order of importance, bronchitis and pneumonia, violence (including suicide), pulmonary tuberculosis, influenza, other respiratory diseases, venereal diseases, whooping cough, and cancer.

Mortality in Relation to Old Age.—The following table demonstrates the fact that people are surviving until later ages, and shows that the number of people surviving to the age of 65 and over has increased to such an extent this century that 37·3 per cent. of the deaths in Bootle at the present day are of persons aged 65 or over, whereas in the first decade of this century the contribution to the general death-rate made by persons over 65 was only 15·5 per cent. In other words, one in three may expect to live to 65, as compared with one in seven thirty years ago.

Period.	DEATHS.		Percentage over 65 Years.
	Total.	Over 65 Years.	
1901—1905 ...	5,671	849	14·8
1906—1910 ...	5,729	923	16·1
1911—1915 ...	6,259	1,197	19·1
1916—1920 ...	6,211	1,304	21·0
1921—1925 ...	5,230	1,352	25·8
1926—1930 ...	5,106	1,533	30·1
1931 ...	1,140	396	34·7
1932 ...	1,027	349	34·1
1933 ...	1,075	390	36·2
1934 ...	990	329	33·2
1935 ...	980	343	35·0
1936 ...	1,037	385	37·1
1937 ...	953	355	37·3

An examination of the ages at death of individuals in this age-group shows that there were 86 deaths at years 65 to 70, 111 deaths at years 70 to 75, 73 at years 75 to 80, 54 at years 80 to 85, 27 at years 85 to 90, 3 at years 90 to 95, and 1 aged 95 years.

Infantile Mortality.—There were 127 deaths of infants, compared with 115 in 1936, and 150 in 1935. The infantile mortality rate was **77 per 1,000** births, compared with 68 in 1936, and 85·5 in the decennium of 1927-1936. An examination of the factors underlying infantile mortality during the year is made on page 78.

The rate of infantile mortality amongst males was 80, and amongst females 75. Throughout England and Wales the rate of infantile mortality was 58 per 1,000 births, and in the 125 great towns it was 62.

The great decline in the infantile mortality rate began substantially in the decennium 1901-1910, during which period active measures were first instituted to secure such a reduction. The following table is again introduced to demonstrate in terms of lives saved what in fact such a decline really means.

DEATHS OF INFANTS UNDER ONE YEAR.			
Years.	Actual recorded Deaths.	Number which would have been recorded had the rate of mortality observed over 1901-10* still prevailed.	Saving.
1911—1915 ...	1434	1596	162
1916—1920 ...	1031	1474	443
1921—1925 ...	912	1480	568
1926—1930 ...	793	1314	521
1931 ...	159	247	88
1932 ...	152	262	110
1933 ...	146	241	95
1934 ...	126	243	117
1935 ...	150	242	92
1936 ...	115	250	135
1937 ...	127	243	116

* Rate of mortality 1901-1910 was 148 per 1,000 births.

From the above table it will be seen that in the decennium 1921-1930 Bootle saved 1,089 infant lives over and above what it was saving in the relatively good decennium 1901-1910, with further savings of 753 during the seven subsequent years.

Thirty-nine children died before they were a week old, and a total of 47, or 37 per cent., of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 28·7 per 1,000.

Young Child Mortality.—In 1937 there were 42 deaths of children aged 1 to 5 years, as compared with 47 in 1936. The principal causes were—pneumonia 12, diphtheria 5, violence and accidents 4, measles 3, tuberculosis 3, diarrhoea 3, and rheumatic fever 2.

Uncertified Deaths.—Seventy deaths (42 of residents and 28 of non-residents) were the subject of a Coroner's inquest, while in 37 cases the death was registered without certification by a medical man or a Coroner; this is equivalent to 3·9 per cent. of deaths uncertified.

CAUSES OF DEATH.

The causes of death, classified according to age, are shown in the table on page 77. The table below sets out the principal certified causes of death.

Year 1937.	No. of Deaths.	Proportion per 1,000 Deaths	
		Bootle, 1937.	England & Wales, 1936.
Bronchitis, pneumonia and other respiratory diseases	194	204	102
Cancer, malignant diseases	111	116	134
Diseases of heart and circulation ...	133	140	311
Tuberculosis (all forms)	83	87	57
Diseases of the nervous system	66	69	82
Prematurity and congenital debility ...	46	48	30
Violence	25	26	46
Diseases of digestive system	42	44	41

Epidemic Diseases. — The epidemic diseases (excluding influenza) were responsible for 44 deaths, as compared with the average of 71·4 during the preceding ten years. There were 4 deaths from measles, as against 8 in 1936; 14 deaths from diphtheria, as against 8 in 1936; 8 deaths from whooping cough, as against 7; 1 death from scarlet fever, as against 2 in the previous year; 2 deaths from enteric fever, as against 1 last year. The deaths from diarrhoea and enteritis were 15, as against 13 during 1936; 13 were of children under two years of age.

Respiratory Diseases. — The death-rate from respiratory diseases, although lower than that of 1936, was somewhat above the relatively low figures that had been recorded in the preceding years. Pneumonia was responsible for 132 deaths, bronchitis for 47, and other respiratory diseases for 15, making the total deaths from respiratory diseases (excluding influenza and tuberculosis) 194, or 20·4 per cent. of the total deaths at all ages, as compared with 226, or 21·8 per cent. in 1936. Influenza was entered as a cause of death in 19 cases, as against 11 in the preceding year.

The table below shows the seasonal nature of deaths from diseases of the respiratory system (excluding tuberculosis and influenza).

Month.	No. of Deaths.	Death-rate per 1,000 living.	Month.	No. of Deaths.	Death-rate per 1,000 living.
January	27	0·36	July	6	0·08
February	35	0·47	August	5	0·07
March	21	0·28	September	7	0·09
April	13	0·17	October	15	0·20
May	11	0·15	November	19	0·25
June	8	0·11	December	27	0·36

Cancer.—Cancer was registered as the cause of death in 124 cases, as compared with 120 in the preceding year. This represents a cancer crude death-rate of 1·49 per 1,000 of the population as compared with 1·01 during the years 1911 to 1920, with 0·78 per 1,000 during the first ten years of this century, and with 0·55 during the ten years 1891 to 1900. The corresponding rate for England and Wales in 1937 was 1·63 and in part the rise in incidence is a measure of the greater proportion of persons of higher age in the population, for a characteristic of malignant disease is its special tendency to attack those over middle age. In this connection the educative functions of the health service are exercised under the difficulty that the case for knowledge and action has to be made sufficiently impressive without arousing fears or creating obsessions, but it has been pointed out that the importance of the matter requires some risk of the latter to be run; for recognition of the early danger signals can be followed by early treatment with improved prospects of a favourable outcome.

ECONOMIC CONDITIONS.

Valuable information as to economic conditions having a bearing on the health of the town is obtained from data kindly supplied by the Clerk to the Public Assistance Committee, by the Ministry of Labour, and by the Clerk to the Bootle Insurance Committee.

It appears that during the year 1937 £74,727 was expended in outdoor relief, including £18,504 to unemployment cases (comparable figures for 1936 were £109,747 and £55,269). Further, the annual return of persons in receipt of Poor Relief on the night of 1st January 1938 shows 480 persons to have been in receipt of institutional relief, of whom 63 were persons not suffering from sickness, accident, or bodily

or mental infirmity, and 4,354 persons to have been in receipt of domiciliary relief, of whom 239 were relieved on account of unemployment. The total number of persons in receipt of Poor Relief on 31st December 1937 was equivalent to 647 per 10,000 of the population, as compared with 926 in 1936. In this connection the altered unemployment assistance administration should be noted.

Returns of the Ministry of Labour show that at the undermentioned dates the following numbers of insured men and women were recorded as unemployed and resident in the Borough, namely:—

				Men.	Women.
28th January 1935	...	...	...	6,741	810
15th April 1935	...	...	...	6,999	710
22nd July 1935	...	...	...	6,334	768
21st October 1935	...	...	...	7,048	812
20th January 1936	...	...	...	6,968	899
27th April 1936	...	...	...	6,632	782
20th July, 1936	...	...	...	6,393	771
26th October 1936	...	...	...	5,902	765

Later such returns are not available, but returns from the three "Clearing Houses" show a monthly approximate unemployed average of 5,146 men and 584 women; the averages for boys and girls are respectively 451 and 212, but for these last two groups it is not possible to say what percentages are actually resident in Bootle.

The following table summarises conditions as to unemployment and public assistance for the past eight years:—

Year.	Approximate monthly average of unemployed adult males.	Persons in receipt of relief on 1st January.		Total cost of outdoor relief.
		Institutional	Domiciliary	
1930	9202	481 (31/3/30)	2484	£ 36,268
1931	7598	475	2864	47,865
1932	7013	375	3936	64,999
1933	6926	455	5659	82,843
1934	6476	431	6871	107,807
1935	6780	410	7270	113,130
1936	6389	548	6751	109,747
1937	5146	511	6586	74,727

During the months of January, February, and March 1937, the Government made grants towards the expenditure on able-bodied persons under the Unemployment Assistance (Temporary Provisions) Acts, 1935-7. As from 1st April 1937, the greater portion of able-bodied unemployed persons in receipt of public assistance was transferred to the Unemployment Assistance Board and in consequence local expenditure considerably reduced.

As regards National Health Insurance, the total number of insured persons in the Borough on 1st October 1937 was 32,462, or 43·5 per cent. of the total population. There was again an increase in the number of prescriptions made up during the year. It will be recalled that the number of prescriptions dispensed for insured persons rose from 50,738 to 157,565 between 1921 and 1936, with a corresponding increase in the annual cost of medicines from £1,955 to £4,909 3s. 11d., while this year the experience is 164,253 prescriptions at a cost of £5,149 6s. 5d. In this connection it has many times been pointed out that there is no reason to think that such consumption of medicine is necessary or desirable in the best interests of the health of the people.

II. GENERAL PUBLIC MEDICAL TREATMENT.

The control of the transferred medical services remains with the Public Assistance Committee, although in November 1931 the Council delegated to the Health Committee the powers contained in Part I of the Local Government Act, 1929, with respect to the provision of hospital accommodation.

INSTITUTIONAL ACCOMMODATION FOR THE SICK.

By agreement continuing until April 1950 arrangements have been made for the reception of Bootle sick into the hospitals transferred to the Liverpool City Council after the passing of the Local Government Act, 1929.

During the year the total admissions, including 556 births, to the transferred hospitals numbered 4,402, of which figure, it may be noted, 2,324 were admissions on the orders of medical superintendents or masters, implying urgent conditions in which it was inadvisable to go

through the ordinary routine of application to a Relieving Officer. In the form in which weekly returns are received it is not easy to ascertain with certainty the number of sick persons (hospital or infirmary patients) as contrasted with those not in need of medical service, but it appears that the average weekly totals of persons chargeable to Bootle in transferred institutions (including able-bodied adults) in the four quarters were respectively 584, 611, 475, and 483, and a weekly average of 527 during the whole of the year. These figures do not include mental patients chargeable to the Authority, the average weekly number of whom was 203 during the year.

The following table, prepared by the Medical Officer of Health of Liverpool at the request of the Ministry of Health, gives a classification of such sick on 31st December 1937:—

CLASSIFICATION OF SICK IN INSTITUTIONS.

Classification of Wards.					Men	Women	Children under 16 years of age	Total
1.	Medical	...	...	...	48	46	—	94
2.	Surgical	...	...	...	22	14	—	36
3.	Chronic Sick*	...	...	...	19	23	—	42
4.	Children	...	...	...	—	—	69	69
5.	Venereal	...	...	...	2	1	—	3
6.	Tuberculosis	...	...	...	6	1	7	14
7.	Isolation	...	...	...	—	—	18	18
8.	Maternity	...	...	..	—	25	—	25
9.	Mental—							
	(a) Lunacy Act, 1890--							
	(i) Short Stay				—	1	—	1
	(ii) Long Stay				20	11	—	31
	(b) Mental Treatment Act							
	(i) Voluntary	...	...		—	—	—	—
	(ii) Temporary	...	...		—	—	—	—
10.	Mental Defectives	...	...		11	—	—	11
11.	Other	...	...		1	—	—	1
Totals ...					129	122	94	345

* Patients needing hospital treatment because they are suffering from some chronic disease; also aged infirm persons whose medical and nursing needs approximate to those of chronic patients.

DOMICILIARY MEDICAL ATTENDANCE.

The administration of medical out-relief included in the functions transferred to the Council on 1st April 1930 is controlled by the Public Assistance Committee acting through the Medical Officer of Health. For this purpose the Borough remained divided into three Districts, Districts Nos. 1 and 2 being under the care of a part-time District Medical Officer throughout the year, while in District No. 3 domiciliary medical attendance was provided by a panel of local practitioners. Drugs and medical requisites for Districts Nos. 1 and 2 were dispensed at Cyprus Grove, and such requirements for District No. 3 were dispensed on prescriptions made up by local chemists at charges assessed by the South-West Lancashire and Cheshire Joint (Prescriptions) Committee.

More than a four-fold increase in the demand on the services of the District Medical Officers has taken place since the transfer of Poor Law duties to the Council in 1930, and the average weekly attendances for medical treatment in the fourth quarter of the year numbered 701 in 1937, as compared with 167 in 1930.

Examination of the returns of surgery consultations and home visits during the year showed the weekly average to have been 226 surgery consultations and 15 home visits in District No. 1, 79 consultations and 11 visits in District No. 2, and 266 consultations and 46 visits in District No. 3.

Open Choice System.—The open-choice system has been established in District No. 3 as from 1st April 1936 when local practitioners agreed to provide domiciliary medical service at a remuneration of 3/6 per person treated per quarter. The scheme supplies public assistance patients with medical and dispensing services, rendered by practitioners of their own choice, and of the standard provided under National Health Insurance Acts; it reduces to a minimum the association with the Poor Law, such association being limited to satisfying the Relieving Officer that the patient is eligible to receive domiciliary medical relief; and it is elastic in its ability to cope with the fluctuating demand for medical service.

It was foreseen that the removal of certain deterrent features attaching to the former method of providing medical treatment would

result in an alteration in the nature and extent of the service, and an examination of the working of the scheme shows the following facts:—

(1) The number of individuals receiving medical relief rose in the twelve months ended 31st March 1938 to 3,355 from the figure of approximately 2,270 individuals who received medical relief from the part-time District Medical Officer in 1935; there has been no significant increase in this respect in Districts Nos. 1 and 2 which are still staffed by part-time District Medical Officers.

(2) The ratio of home visits to surgery attendances was 1 to 9.4 in 1935, and in 1937 under the open-choice scheme the ratio had altered to 1 to 5.8; there was no significant alteration in Districts Nos. 1 and 2 where the corresponding figures for 1935 were 1 to 10.8 and for 1937 were 1 to 11.7.

(3) The total number of attendances increased to 16,221 in 1937 from 10,244 in 1935, representing an average of 4.9 attendances per patient as against 4.5 for 1935; there were 13,823 surgery attendances and 2,398 home visits.

(4) The total number of items prescribed for patients in District No. 3 was 27,887, as compared with 30,942 in Districts Nos. 1 and 2, or 8.3 items per patient treated by the open-choice scheme, as compared with 7.8 items per patient treated by District Medical Officers.

(6) Of the total of 3,355 individuals receiving medical treatment during the twelve months ended 31st March 1938, 1,889 (56.3 per cent.) attended during one-quarter of the year, 823 (24.5 per cent.) attended during two quarters of the year, 408 (12.2 per cent.) attended during three quarters of the year, and 235 (7 per cent.) attended during four quarters of the year.

VACCINATION.

According to information supplied by the Vaccination Officer, 1,244 successful primary vaccinations and five successful re-vaccinations were performed during the year ended 30th September 1937, as compared with the previous year's figures of 1,215 and four respectively.

Appendix 16 presents the Annual Return of the Vaccination Officer respecting vaccination of children whose births were registered from 1st January to 31st December 1936, inclusive.

III. SANITARY CIRCUMSTANCES.

Water Supply.—The Borough derives its water supply from the Liverpool Corporation Waterworks, which normally distribute to the district water from the Prescott Storage Reservoirs consisting of a mixture of the Rivington and Vyrnwy supplies; on occasion a small proportion of pumped water from the Green Lane wells is mixed with water from the above sources. Bacteriological reports consistently showing the absence of coliform organisms in 100 c.c., and the virtual absence, or presence in single figures only per c.c., of bacteria at 37°C, illustrate the high degree of purity of the supply.

Drainage and Sewerage.—The sewerage system is entirely by discharge into the River Mersey, with drainage areas and outfalls as described in the Report for 1930.

Closet Accommodation and Scavenging.—Every house, with the exception of three in the outlying parts of Orrell, is provided with one water closet or more, the conversion of middens having been completed in 1910. Similarly all houses are provided with ashbins, the conversion of ashpits having been completed in 1932.

SANITARY INSPECTION OF THE DISTRICT.

The Staff for this work consists of the Chief Sanitary Inspector with four assistants, one of whom is engaged principally on special duties in connection with food inspection.

Nuisances.—On page 90 will be found a tabular statement showing the number of inspections made, and notices served by the Chief Sanitary Inspector. It will be noted that the number of nuisances for which notices were served on owners and occupiers was 3,813, as against 5,031 in 1936; the other work done under the Housing Acts is set out in the Housing Section of this report on pages 68 to 72.

Conditions in Offices.—On October 1st 1937 the Consolidated Public Health Act brought into force enlarged powers and duties in respect of offices consequent on the new definition of workplace embracing all places of clerical employment. Systematic inspection of offices has, therefore, been commenced, and by 31st December 114 business premises were inspected in regard to overcrowding, ventilation, cleanliness, and sanitary accommodation. Appendix 9 classifies the re-

sults of inspection of these offices, and shows in general the satisfactory position—of the 114 premises inspected, comprising 317 office rooms, none were found to be over-crowded, 6 only were found to have unsatisfactory ventilation, in 5 the unaided natural lighting was unsatisfactory, and in 1 the sanitary accommodation was unsatisfactory; suitable action was taken to effect necessary improvements.

Fertilisers and Feeding Stuffs Act, 1926.—Eight samples of feeding stuffs and two samples of fertilisers were obtained during the year.

Rag Flock Acts, 1911 and 1928.—There are no premises in the Borough where rag flock is manufactured, sold, or used.

Rats and Mice Destruction Act, 1919.—The occupiers of food shops, cafes, etc., have been frequently advised during the year as to the best means of ridding the premises of rats, and, in some cases, alterations of shops, and concreting of floors have been undertaken with excellent results. The Rat Officer has been advised of all complaints received, to which he has given special attention, but it should be remembered, the fertility of the rat being what it is, that the usefulness of his services cannot be measured in terms of rats caught, and that his work is justified in so far as he ensures the exclusion of rats from places that matter, such as food-stores and dwelling-houses.

For National Rat Week in November advertisement of the fact of the responsibility of occupiers was inserted in the local Press, and requests were sent to horse keepers, millers, warehouse owners, etc., to make special efforts during the week, together with the circulation of a pamphlet giving suggestions as to suitable methods of ridding their premises of rats.

Common Lodging Houses. — There are four Common Lodging Houses in the Borough. They are all registered for the accommodation of men only, and between them have 168 beds. They were regularly inspected and a satisfactory standard of cleanliness was always maintained.

Canal Boats.—During the year 107 visits of inspection were made to canal boats on the Leeds and Liverpool Canal in the Borough. One written notice was served during the year, and one defect was remedied after verbal caution had been given. Bootle is not a Registration Authority.

Verminous Infestation.—During the year the problem of the prevalence of infestation of dwellings by bed-bugs continued to receive careful attention. In view of the difficulty experienced in the early part of the year of securing the complete disinfection of a badly infested unoccupied municipal house, it was found necessary in that case, and in all subsequent cases of infestation in vacant houses, to make a careful examination of the following fittings in addition to the places to which inspection is normally directed, viz., in and behind the door locks of all rooms used as bedrooms, the gas and electric light fittings in such rooms, and the fixed hopper ventilators in external walls of rooms without fireplaces. Of the total number of such fittings examined about one-half was found to be affected, together with the doors, walls or ceilings to which these fittings were fixed. In vacant houses found to be badly infested the procedure is as follows:—

(a) Stripping off and subsequent burning of wood skirtings and picture rails in all bedrooms, treating wall surfaces by subjection to blow-lamp flame, renewing skirtings in cement, and renewing wall plasterwork where necessary.

(b) Stripping off all door architraves, and window and door beading in the bedrooms, and subjecting same to blow-lamp flame.

(c) Taking off all door locks, wood blocks to electric light or gas fittings, treating with blow-lamp flame, and immersing in Zaldecide.

(d) Thorough spraying of cockloft with Zaldecide, together with similar treatment of landings, staircases, and living rooms.

(e) Removal of wooden hopper ventilators in all bedrooms where found and replacing by 9in. x 6in. terra cotta ventilators.

(f) Removal of portion of the floor boards in each room as required for sub-floor fumigation.

(g) Preparatory to final fumigation by sulphur, sealing up of all windows, ventilators and chimneys from the outside.

In vacant houses where the infestation is found to be slight, a modified treatment on lines indicated above is carried out.

Occupied houses, both municipal or privately owned, are treated in a similar manner, so far as circumstances permit, though it will be appreciated that it is usually not possible to carry out as thorough a treatment as one would wish. The family bedding is treated by steam disinfection.

In the 89 municipal houses treated during the year, the average cost per house was £7 7s. 0d., which figure includes the cost of re-decoration and re-instatement of damaged woodwork, etc.

The following table shows the number of houses treated during the year:—

Municipal Houses.				Privately-owned Houses.			
Vacant.		Occupied.		Vacant.		Occupied.	
Full Treatment.	Modified Treatment.	Full Treatment.	Modified Treatment.	Full Treatment.	Modified Treatment.	Full Treatment.	Modified Treatment.
61	13	12	3	14	—	—	32

As to new tenancies, all tenants before taking up occupation of municipal houses have their furniture and effects treated by fumigation with hydrogen-cyanide at the Council's fumigation station at Pine Grove; the furniture is loaded into a container, taken to the fumigation station for five hours' treatment, and delivered the same day to the new residence completely free of vermin; the bedding is disinfected by steam.

Evidence of the success of the treatment is afforded by the fact that 140 tenants whose furniture and effects were dealt with during the year have been re-visited at intervals of six weeks, and careful inspection has failed to reveal any recurrence of the infestation. All the cases dealt with were treated by the Council's own plant.

Occupied houses, both municipal and privately owned, found to be the subject of infestation by cockroaches, were dealt with by taking up a portion of the floors in the affected rooms, thoroughly cleaning out the spaces below the floors, spraying thereunder with Cromessol, and finally dusting all places most frequented by the insects, viz., kitchens, pantries, round sinks, and along hot water pipes, with a preparation composed of two parts of sodium fluoride to one part of pyrethrum powder. Treatment in this way has been found to be effective, as subsequent visits paid to the affected premises have failed to reveal any recurrence of the infestation. One hundred and twenty-eight houses were so treated, of which number 4 were privately owned, and 124 owned by the Corporation.

Smoke Abatement.—Under Section 2 of the Public Health (Smoke Abatement) Act, 1926, a bye-law was made by the Council in December 1930 enacting that the emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes from a chimney other than a dwelling house shall be presumed to be a nuisance.

There are approximately 81 industrial chimneys in the Borough, to which some 89 boilers of all types are connected. In eleven instances mechanical stokers of modern design are fitted, and in four instances oil fuel is in regular use; in addition there are some twelve furnaces used for metal smelting.

During the year 37 observations of chimneys were made, and in 13 instances smoke was noted as emitted in excessive quantities; in each case the premises were visited by the inspector, who investigated the cause and advised as to prevention. Intimation notices were also served in seven instances.

Shops Act 1934.—Under Section 10, which requires the provision of suitable arrangements for the health and comfort of shop-workers, 123 shops were visited during the year, and as a result improvements over the whole period can be summarised as follows:—

Provision of sufficient sanitary conveniences	...	47
„ „ „ washing facilities	... ..	40
„ „ facilities for taking meals	... ..	11
„ „ suitable ventilation	... ..	29

SWIMMING BATHS.

The management of the two public baths in the Borough and the measures adopted to ensure a satisfactory condition of the water in each bath remain as described in the Annual Report for 1935.

IV. SANITARY CONTROL OF THE FOOD SUPPLY.

One of the Sanitary Inspectors holding the special Food Certificate of the Royal Sanitary Institute is engaged for a large part of his time on work connected with the food supply, the sanitary supervision of which is undertaken in order to secure cleanliness in the preparation and distribution of foodstuffs, and to diminish the risk of possible infection thereof with disease-producing bacteria.

MILK SUPPLY.

Source of Milk Supply.—That portion of the milk supply of the Borough not brought by rail or road is derived from cows kept in shippons, of which there are now 15 in the town; the cows number approximately 194, a further decrease from the pre-war figure of about 550. All the shippons received the careful attention of the Inspector, who paid 162 visits to them during the year. It is estimated that about one-sixth of the Bootle milk supply is derived from cows kept in these town shippons.

Amount of Milk Supply.—In January 1938 the nature and amount of the local milk supply was investigated, and it was found that approximately 1,500 gallons of raw milk, 1,300 gallons of pasteurised milk, and 300 gallons of sterilised milk are consumed daily. This total of 3,100 gallons daily perhaps slightly underestimates the amount consumed, but in any case it is established that not more than one-third of a pint of milk per head is taken daily.

Dairies and Cowsheds.—*Milk and Dairies Orders 1915 and 1926.*—There are 57 premises registered as dairies or milkshops in the Borough, and 15 premises registered as cow-sheds, and there are 83 registered retail purveyors of bottled milk only. A careful routine inspection is maintained by the Inspector working in collaboration with the Veterinary Officer. Four hundred and thirty-six visits of inspection were made to cowsheds and dairies during the year, and in many cases as a result of suggestions made and advice given alterations were carried out with resulting improvement in condition; on the whole it may be said that these premises are maintained in a satisfactory state.

Cleanliness and Safety of Milk.—A new Milk (Special Designations) Order came into force on June 1st 1936, prescribing the following special designations for milk, namely:—Tuberculin Tested, Accredited, and Pasteurised, and abolishing the previous designations—Certified, Grade "A" (Tuberculin Tested), and Grade "A." Tuberculin Tested milk is derived from cows which have passed a veterinary examination and a tuberculin test, and must satisfy a prescribed methylene blue reduction test for cleanliness, and further must contain no coliform bacilli in one-hundredth of a millilitre. Accredited milk is raw milk from cows which have passed a veterinary examination, and must satisfy the same bacteriological tests as are prescribed for tuberculin tested milk. Pasteurised milk has to be retained at a temperature of not less than 145°

and not more than 150° Fahrenheit for at least thirty minutes, and then be immediately cooled to a temperature of not more than 55° Fahrenheit; it shall contain not more than 100,000 bacteria per millilitre. At the end of 1937 there were three Bootle dairymen holding licences to produce Accredited milk, and one dairyman holds a licence to bottle Accredited milk.

With the object of promoting the cleanliness and safety of the local supply, bacteriological examination of milk samples has not been limited to the designated milks, and 112 examinations in all were made during the year. The results in 83 samples of milk, other than pasteurised, may be summarised thus:—

(a) Of 43 samples of Accredited Milk, 31 were up to standard, six did not satisfy the methylene blue test and failed to conform to the requirements of the absence of coliform bacilli in one-hundredth of a millilitre, and six failed in one or other respects.

(b) Of 40 samples of ordinary milk, 19 were of "Accredited" standard by both tests, 12 satisfied the methylene blue requirement for "Accredited," and nine were unsatisfactory as to the presence of coliform bacilli.

Milk and Tuberculosis.—The results of bacteriological examination of 100 samples of milk showed that six samples were infected with tubercle bacilli. In two instances the milk was produced from cows in Bootle shippens, and cows were sold from the herds and slaughtered between the dates when the samples were taken and the dates of the reports by the bacteriologist; further examination, both veterinary and bacteriological, showed the remaining cows in the herds to be free from infection. In the remaining four samples, the milk was produced at farms in the Lancashire County area, and in two instances the infected cow was traced and slaughtered under the Tuberculosis Order 1925, but in the remaining two cases the source of infection could not be traced.

Pasteurised Milk.—Previous annual reports have drawn attention to the fact that under present circumstances the ordinary raw milk supply cannot be regarded as safe, and that cleanly production is no safeguard against infection conveyed in the milk from a tuberculous cow. It is satisfactory to note, therefore, that a Government White Paper on Milk Policy has now forecast legislation which will confer powers on local authorities to require the efficient pasteurisation of all milk, other than tuberculin tested and sterilised milk, sold in their area.

During the past year in Bootle two licences were renewed for the production of pasteurised milk. The number of milk samples obtained from these two licence holders during 1937 was 16, of which 13 conformed to the requirements of the Ministry of Health.

PREPARATION OF ICE CREAM.

Bootle Corporation Act, 1930, Section 21, requires the registration of persons and premises used for the manufacture, etc., of ice cream, and gives powers for revocation of the registration of such persons if the Corporation is satisfied that the public health is, or is likely to be, endangered by any act or default of such persons.

At the end of the year the registrations totalled:—

PREMISES—

For the manufacture for sale and sale of ice cream ...	...	62
For the sale only of ice cream ...	...	64

PERSONS—

For the manufacture for sale and sale of ice cream ...	...	62
For the sale only of ice cream ...	...	74

These special powers of supervision were obtained because of the necessity of ensuring the wholesomeness of milk products eaten largely by children, and during last season 79 visits of inspection were made to registered premises, and 30 samples were obtained and submitted for bacteriological examination as affording at present the most reliable index of the degree of cleanliness reached in the production of the ice cream. The following table sets out the results of such examinations.

BACTERIAL COUNTS IN ICE CREAM.

Year.	No. of Bacteria per c.c.				Coliform Bacilli.	
	Over 1,000,000	Between 500,000 and 1,000,000	Between 100,000 and 500,000	Under 100,000	Absent in 1/100 c.c.	Present in 1/100 c.c.
1937	—	7	3	20	17	13
1936	9	4	3	14	15	15
1935	2	6	5	11	11	13
1934	3	1	8	3	4	11
1933	6	3	7	6	6	16
1932	4	2	1	12	10	9

MEAT AND OTHER FOODS.

Butchers' Shops.—There is no slaughterhouse in the Borough, and the inspection of meat is confined to butchers' shops, food factories and cold stores. There are 81 butchers' shops, to which 716 visits of inspection were made during the year. On 21 occasions unsound and diseased meat was found in shops and food factories; the bulk of the diseased meat had been previously inspected outside the Borough, in which cases the authorities concerned were notified. In general the standard of cleanliness of butchers' shops in the Borough is high.

Public Health (Meat) Regulations, 1924.—It was necessary on 26 occasions to warn tradesmen respecting contraventions of the Regulations. Frequent visits of inspection are made to shops and premises, and vehicles containing meat are regularly inspected for general cleanliness.

Public Health Act, 1925.—Under Section 72, which provides for the cleanliness and sanitary conditions of premises where food is prepared or stored for sale it was necessary on 6 occasions to serve notices on occupiers of premises in respect of unsatisfactory conditions.

Merchandise Marks (Imported Goods) No. 7 Order, 1934. — This Order requires the marking of imported meats with an indication of origin on exposure for sale, *e.g.*, Brazil, Argentine, New Zealand; and is a safeguard for the buying public inasmuch as imported frozen or chilled meats are appropriately marked. Some 325 visits of inspection were made, and except in a very few cases, the provisions of the Order were observed.

Merchandise Marks Act, 1926.—The Act provides for the marking of imported food stuffs (fresh apples, butter, currants, raisins, sultanas, eggs, raw tomatoes, and honey). Some 189 visits of inspection were made under this Act, and except in comparatively few instances the origin of the produce was found to be indicated.

Fishmongers' Shops. — There are 26 shops in the Borough from which fresh fish is sold, and 101 visits of inspection were made during the year. These shops are maintained in satisfactory condition.

Fish Frying Shops.—The trade of fish frying is carried on at 59 shops, to which 92 visits of inspection were made during the year. Suggestions were made from time to time to occupiers regarding

methods of preparation, installation of ranges, etc., and considerable improvement resulted, and although there are no bye-laws in force in the borough with respect to these premises, they are maintained in a satisfactory condition.

Disposal of Unsound Food.—The amount of unsound food detected is shown in the table below; all was voluntarily surrendered.

					Tons.	Cwts.	Qrs.	Lbs.
Raw Meat	...	...	...	...		7	3	5
Canned Meat	...	...	...	...	1	6	2	24
Canned Fruit	...	...	...	...	1	18	0	5
Raw Fish	...	...	...	...				8
Canned Fish	...	...	...	...		6	1	15
Canned Milk	...	...	...	...	2	1	3	2
Canned Beans	...	...	...	...			3	25
Jam	...	...	...	...		2	3	25
Canned Vegetables		...	...	...				8
Canned Oranges	...	...	...	...			2	7
Yeast	...	...	...	...		6	0	7
Potatoes	...	...	...	...		2	2	17
Pickles	...	...	...	...				8
Canned Tomatoes	...	...	...	...			3	24
Cocoa	...	...	...	...				8
Cheese	...	...	...	...				1
Apples	...	...	...	...			2	6
Canned Fruit in Jelly		...	...	...		9	3	12
					—	—	—	—
				Total	...	7	5	2 11
						—	—	—

Several methods of disposal of unsound food were utilised. Most of the butchers' meat was destroyed under the supervision of the Inspector at the Corporation Destructor, Pine Grove. A proportion of the canned meat was permitted to be used, under supervision, for the preparation of animal food, whilst the remainder was used for pig-feeding at three of the piggeries in the Borough; the deliveries were checked on arrival, and the Inspector saw that they were so disposed of as to make it impossible for this food to be used for human consumption.

Food Factories.—There are 17 food factories in the Borough and systematic inspection is carried out, 183 visits of inspection having been made during the year. Although maintained in a very satisfactory condition, on occasional warnings were given respecting lack of cleanliness of the premises. 44 premises are now registered under the Bootle Corporation Act, 1920, as used for the preparation of potted or preserved foods. One new factory, for the manufacture of margarine, was registered in the Borough during the year.

Bakehouses.—There are 20 bakehouses (5 being underground) and 22 confectionery bakehouses. 126 visits of inspection were made during the year. The general condition is good.

Cold Stores.—These premises are regularly inspected and are maintained in satisfactory condition; 33 visits were made. One of the stores is a registered egg store, but no marking of shell eggs under the Ministry of Agriculture's Regulations was undertaken during the year.

Food and Drugs (Adulteration) Act, 1928.—The Public Analyst, to whom samples are submitted, is Mr. W. H. Roberts, M.Sc., F.I.C.

Table 10 on page 94 shows that 270 samples were taken, of which 18, or 6·7 per cent., were adulterated or not up to standard. Two hundred and fifty-six of these were taken informally, and in cases where adulteration was detected formal samples were subsequently obtained in order that the necessary legal action might be instituted. One hundred and twenty-eight samples of milk were obtained, of which 114 were taken informally; in the other 14 cases however the procedure prescribed by the Act was adopted. Fourteen of the milk samples (4 formal, 10 informal) were found to be adulterated.

Of the four formal samples of milk found to be adulterated, legal proceedings were instituted in one instance against a vendor for selling milk with a deficiency in milk fat of 15 per cent.; an "appeal to cow" sample was taken subsequently which showed on analysis a deficiency in milk fat to the extent of 21 per cent., in view of which the summons was withdrawn, the vendor giving an undertaking to improve the quality of his milk, and to pay the Analyst's fee of £2 2s. 0d. Two formal samples taken subsequently were found to be genuine. In the remaining three instances, the adulteration being slight, the vendors were interviewed and cautioned.

The total number of samples obtained of milk produced outside the district was 69, of which 36 were taken in course of delivery.

The Public Analyst has kindly supplied the results of the analysis of every sample of milk submitted to him from Bootle, and it is interesting to note that, including the samples returned "not genuine," the average amount of fat was 3.72 per cent., and of non-fatty solids 8.94 per cent., the minimum standard fixed by the Board of Agriculture in the Sale of Milk Regulations, 1901, being 3 per cent. fat, and 8.5 per cent. non-fatty solids, below which figures milk is presumed to be not genuine.

One sample of mixed fruit jam was found to be deficient in soluble solids to the extent of 14.6 per cent. The manufacturer was written to and cautioned. In October 1930 the Food Manufacturers' Association published an agreement which had been arrived at with the Society of Public Analysts establishing voluntary standards of quality for jams, and under this agreement all jams are to contain at least 68.5 per cent. of soluble solids.

Ten samples of condensed milk were submitted to the Analyst, who certified that they were all genuine, and correctly labelled as provided by the Public Health (Condensed Milk) Regulations, 1923-1927.

Public Health (Preservatives, etc., in Food) Regulations, 1925-1927.—A reference to Table 11 on page 95 shows that 218 samples were examined under these Regulations for the presence of preservatives, including 128 of milk. All the samples were found to be correct except three. No prohibited preservatives or colouring matters were found.

In one case preservative was found in a sample of meat paste, which article of food may not contain preservative; the manufacturer was written to and cautioned.

One manufacturer was cautioned in respect of an excess of preservative in a sample of jam, and a second manufacturer was also cautioned for exceeding the amount of preservative in a sample of sausages.

V. PREVALENCE OF INFECTIOUS DISEASES.

The number of cases of infectious diseases notified during the year is briefly summarised below, and fuller detail is given in Table 2, page 76.

There was no notification of small pox, cholera, plague, typhus fever, relapsing or continued fever, puerperal fever, trench fever, poliomyelitis, or encephalitis lethargica.

				Cases notified.	Cases admitted to hospital.	Deaths.
Enteric Fever	...	...	...	21	17	2
Scarlet Fever	...	...	...	235	154	1
Diphtheria	...	...	...	263	260	14
Puerperal Pyrexia	...	...	...	11	6	3
Ophthalmia Neonatorum	...	...	...	9	—	—
Erysipelas	...	...	...	45	17	—
Infantile Diarrhoea (under two years)—voluntarily notifiable				16	2	13
Influenzal Pneumonia	...	...	...	29	14	—
Acute Primary Pneumonia	...	...	...	181	65	57
Cerebro-spinal Meningitis	...	...	...	5	5	—
Malaria	...	...	...	1	—	—
Dysentery	...	...	...	1	1	—
Tuberculosis—						
(a) Pulmonary	...	...	...	143	81	73
(b) Non-Pulmonary	...	...	...	58	21	10

ENTERIC FEVER.

Sixteen cases of typhoid fever and five cases of paratyphoid fever were notified during the year. An outbreak of paratyphoid fever in the north of Liverpool and in Bootle occurred in January, and presented a number of features of interest. In Bootle the first notification was received on 6th January, and 16 cases in all were notified by 30th January. The notifications were, owing to the nature of the disease, necessarily delayed, and the date of onset of the first case was probably 26th December, 1936, and in nine other cases the date of onset was before 3rd January 1937; three of the six cases with onset subsequent to 3rd January were secondary cases occurring in previously-infected households. Two further cases of paratyphoid fever were notified on 6th and 8th February, respectively, but the diagnosis was not confirmed.

Having in mind that the incubation period can vary from seven to twenty-one days, and that water or food are the usual infecting agents, the following conclusions appear to be justified:—

(1) The Bootle cases were part of an outbreak of paratyphoid fever originating in Liverpool.

(2) The infection was introduced into Liverpool about the middle of December 1936.

(3) The source of infection disappeared shortly after it came, and it is probable that it had, in fact, disappeared before the recognition of the first cases drew attention to the matter.

Extensive enquiries were made by this department and by the Medical Officer of Health for Liverpool, and the latter reported that a carrier of *B. Paratyphosus B.* was discovered among the workers at a bakery which had supplied bread to a very large number of the patients; this carrier was admitted to isolation hospital for observation, and there is reason to believe that he was possibly the cause of the outbreak.

SCARLET FEVER.

Incidence. — The last outbreak of scarlet fever on a large scale occurred in 1933; this was followed by a period of low prevalence until the fourth quarter of 1936, when there was a short period of relatively high incidence. Conditions reverted to normal until the fourth quarter of 1937, when there was a sharp rise with 117 cases notified. The total for the year was 235, constituting an incidence of 3.10 per 1,000 of the estimated population, compared with 2.48 in 1936, and a rate of 2.33 per 1,000 for England and Wales.

Mortality.—There was one death from scarlet fever during the year; this is equivalent to a mortality rate of 0.01 per 1,000 of the population, as compared with 0.01 per 1,000 for England and Wales. The table below shows that Bootle, in common with other areas in South West Lancashire, has usually returned higher scarlet fever mortality-rates than the country as a whole, although the experience of the last five years is equivalent to a reduction to one-twelfth of the rate obtaining at the end of last century, and to one-thirty-fifth of the rate of sixty years ago.

Period.	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1873-1880 ...	188	1·06	0·73
1881-1890 ...	165	0·39	0·34
1891-1900 ...	202	0·37	0·16
1901-1910 ...	160	0·25	0·11
1911-1920 ...	70	0·11	0·05
1921-1925 ...	36	0·09	0·03
1926-1930 ...	22	0·05	0·01
1931-1935 ...	12	0·03	0·01
1936 ...	2	0·03	0·01
1937 ...	1	0·01	0·01

In each of twelve houses two cases of scarlet fever occurred, and in five houses there were three cases, and in one house there were four cases.

Hospital Isolation in Scarlet Fever.—One hundred and fifty-four Bootle cases, or 65 per cent. of the cases notified, were admitted to Linacre Hospital, with no deaths. There was no evidence that the policy of selective admissions which was necessary during the last quarter of the year, resulted in any public health disadvantage.

Return Cases. — During 1937 there were two instances in which the discharge of scarlet fever cases from the hospital was followed by the occurrence of a new case or cases in the home. The return case rate was equivalent to 1·1 per cent. of those discharged, as compared with 1·4 per cent. in 1936.

DIPHTHERIA.

Incidence.—The period of relatively high diphtheria incidence dating from 1927 came to an end in 1936, but during the last quarter of 1937 the incidence again rose, and during 1937 263 cases were notified as compared with 129 during 1936, and an average of 203 for the ten years ended 1937. The incidence was 3·46 per 1,000 of the estimated population, and the case fatality was 5·3 per cent. Two hundred and sixty, or 99 per cent. of those notified, were removed to hospital. Two cases required tracheotomy during the year; neither recovered.

The occurrence of a secondary case of diphtheria in an infected household was recorded on nineteen occasions, the occurrence of a third case on eight occasions, and the occurrence of a fourth case on three occasions.

Mortality.—The table which follows demonstrates the gravity of the type of infection, due apparently to infection with a more virulent organism producing rapid and severe toxæmia, which prevailed in 1934, and the reversion to a milder type which has obtained during the last two years.

Period.		BOOTLE.		England & Wales.
		No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1875-1880	...	43	0·24	0·13
1881-1890	...	92	0·22	0·16
1891-1900	...	136	0·24	0·32
1901-1910	..	120	0·18	0·19
1911-1920	...	132	0·18	0·14
1921-1925	..	32	0·08	0·09
1926-1930	...	39	0·09	0·08
1931-1935	...	92	0·24	0·07
1936	...	8	0·10	0·07
1937	...	14	0·18	0·07

Prevention.—During 1932 a scheme was inaugurated whereby an offer of immunisation against diphtheria was made to the parents of infants and young children in the Borough. Such protection can be conferred without risk to the child and without any disturbance of health by the administration of three injections at, say, fortnightly intervals of a toxoid-antitoxin mixture which stimulates the body to produce immunity against subsequent exposures to infection; the immunity is not absolute and is not produced instantaneously, but increases steadily through a period of several weeks or months.

The following tabular statement classifies the children who completed the series of inoculations during 1937, making, with those inoculated in the preceding years, a total of 4,766.

Place of Treatment.	Total.
Elementary Schools	551
Infant Clinics	124
Linacre Hospital	12
Total ...	687

Hitherto, there have been 23 instances of diphtheria in the 4,079 inoculated children; particulars of twenty-one cases have been given in previous annual reports. During 1937, notifications of diphtheria in two children inoculated in 1934 were received; the cases were of moderate severity only, and recovered without complications.

OTHER INFECTIOUS DISEASES.

Influenza.—Twenty-nine notifications of influenzal pneumonia were received, and 19 deaths from influenza were recorded. In part these figures represent an outbreak of influenza which appeared in Bootle in the first or second week of January and continued throughout February without having an appreciable effect on the death rates. The symptoms were relatively mild but school attendance was seriously affected, some Infants' Departments returning percentages as low as 62, and there were reports of much absence among staffs of offices and works.

Measles.—During 1937 measles caused four deaths, compared with eight in 1936, and an average of 19·6 during the ten years ended 1936. The Bootle death-rate from this cause was 0·05 per 1,000, compared with 0·02 throughout England and Wales.

Complete information as to the incidence of measles is not now available, but during the year 86 cases occurring in school children were reported under the Bootle Corporation Act, 1920, 59 of these being in the last quarter of the year.

The table which follows sets out the reduction in the mortality from measles which has occurred throughout England and Wales since 1890; it also shows that although some degree of reduction has been obtained locally the measles death rate for Bootle is still high, and comparison with the corresponding tables for scarlet fever and diphtheria demonstrates the greater importance of measles as a killing disease.

Period.	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1891-1900 . .	165	0·30	0·41
1901-1910 ...	294	0·45	0·31
1911-1920 ...	266	0·37	0·28
1921-1925 ...	112	0·27	0·12
1926-1930 ...	85	0·20	0·10
1931-1935 ...	116	0·30	0·07
1936 ..	8	0·10	0·07
1937 ...	4	0·05	0·02

Whooping Cough.—Whooping Cough caused 8 deaths during 1937 compared with 7 in 1936 and 5 in 1935. The death-rate was 0·10 per 1,000 of the population, compared with 0·04 throughout England and Wales. Efforts were continued to educate the public to appreciate the fact that measles and whooping cough (co-called minor infectious diseases) are responsible year by year for many preventable deaths.

Diarrhoea.—Deaths from this disease numbered 15, or a rate of 0·20 per 1,000 of the population as compared with 0·17 last year. Thirteen of the deaths occurred in children under the age of two years, giving a rate per 1,000 births of 7·9 in Bootle as compared with 5·8 throughout England and Wales.

The arrangements instituted in previous years by which this disease is notifiable during the third quarter of the year were continued, and 16 notifications were received, as compared with 11 in 1936, and 29 in 1935. The receipt of these notifications enabled instruction on the necessary sanitary precautions against the spread of infection to be given by the Infant Welfare Visitors, as well as nursing attention to be given by the Bootle District Nurses' Association.

LINACRE ISOLATION HOSPITAL.

Linacre Isolation Hospital, by arrangements with the respective Authorities, receives cases of infectious diseases from the urban districts of Litherland and Formby, as well as from the borough.

The year 1937 showed an increase in cases admitted, the total being 542 as against 385 in 1936. The following table gives particulars of the cases admitted to the infectious disease wards, while particulars of cases in which the diagnosis was revised are given in Appendix 17, page 101.

CASES TREATED IN THE INFECTIOUS DISEASE WARDS, LINACRE HOSPITAL.

DISEASE.	No. in hospital on 1st. January 1937.				No. admitted during the year.				No. discharged during the year				No. died during the year.				No. remaining in hospital 31st. December 1937.			
	Bootle	Lither- land	Formby	Total	Bootle	Lither- land	Formby	Total	Bootle	Lither- land	Formby	Total	Bootle	Lither- land	Formby	Total	Bootle	Lither- land	Formby	Total
Scarlet Fever.	37	5	—	42	134	25	8	167	154	27	7	188	—	—	—	—	17	3	1	21
Scarlet Fever complicated by other disease.	—	—	—	—	5	2	—	7	4	2	—	6	—	—	—	—	1	—	—	1
Admitted as Scarlet Fever but diagnosis revised.	3	2	—	5	15	1	—	16	17	3	—	20	—	—	—	—	1	—	—	1
Diphtheria.	11	1	—	12	188	20	14	222	155	19	2	176	9	2	2	13	31	—	10	41
Diphtheria complicated by other disease.	—	—	—	—	4	—	—	4	3	—	—	3	—	—	—	—	1	—	—	1
Admitted as Diphtheria but diagnosis revised.	1	—	—	1	68	15	2	85	70	14	2	86	1	—	—	—	2	1	—	3
Other diseases	2	—	—	2	39	2	—	41	37	2	—	39	2	—	—	—	2	—	—	2
TOTALS	54	8	—	62	453	65	24	542	440	67	11	518	12	2	2	16	55	4	11	70

Tracheotomy was performed on two occasions during the year; neither case recovered.

Cross-Infection.—The following cases of cross-infection arose during the year. One case of diphtheria contracted chicken-pox and one case contracted scarlet fever; three cases of scarlet fever contracted measles, and one case admitted as scarlet fever, but not suffering from it, contracted scarlet fever in the ward.

Health of Staff.—Staff sickness was as follows during the year. One nurse contracted chicken-pox and was warded 21 days; one nurse contracted quinsy and was warded 38 days; one nurse contracted tonsillitis and was warded 4 days; one nurse contracted mumps and was warded 15 days; and one maid contracted erythema nodosum and was warded 6 days.

During the year ten nurses were Schick-tested and Dick-tested to determine their susceptibility to diphtheria and scarlet fever. Of these, five re-acted positively to the Schick-test and three re-acted positively to the Dick-test; the susceptible nurses were immunised.

Bacteriological Laboratory Work—

Examinations required.	Positive result.	Negative result.	No. of Specimens examined.
Swabs for Diphtheria ...	521	4513	5034
Sputa for Tubercle Bacilli	221	788	1009
	<hr/> 742	<hr/> 5301	<hr/> 6043

In addition, 94 samples of milk, 596 specimens for venereal disease, and 202 miscellaneous specimens and samples (including 30 of ice cream) were examined in the Pathological Department of the Liverpool University or other Pathological Laboratory; there was a large volume of such work arising from the outbreak of paratyphoid fever.

VI. TUBERCULOSIS.

Notification Register.—The Tuberculosis Notification Register contains the names of all persons notified as suffering from tuberculosis since the first operation of the Public Health (Tuberculosis) Regulations, 1911, after making corrections by the removal of names of those

who have died, left the district, have been cured, or have been pronounced not to be suffering from tuberculosis. The register on 31st December 1937 included 292 males and 238 females suffering from pulmonary tuberculosis, and 117 males and 141 females suffering from non-pulmonary tuberculosis, making a total of 788 cases.

Incidence.—The total number of new cases coming to the knowledge of the Medical Officer of Health during 1937 was 201, as compared with the figures of 246, 242, 212, 251, 258, 231, and 208 in the years from 1930 onwards.

The following table sets out the age and sex distribution of notifications and deaths due to tuberculosis during the year under review:—

Age Periods	New Cases notified				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M	F	M	F	M	F	M	F
0—1 year ...	1	2	...	...	...	...	...	...
1—5 years ..	2	1	4	1	1	1	1	...
5—15 „ ...	2	5	15	13	...	...	2	2
15—25 „ ...	12	23	2	7	9	12	...	3
25—35 „ ...	16	19	3	9	4	9	1	1
35—45 „ ...	12	6	2	...	5	5	...	...
45—55 „ ...	17	6	1	...	13	3	.	.
55—65 „ ...	10	3	...	1	5	...	...	...
65 and upwards	3	3	...	...	3	3	...	...
Totals ...	75	68	27	31	40	33	4	6

Mortality.—The number of deaths caused by tuberculosis during 1937 was 83, or one death in every eleven, giving a death-rate from this cause of 1·11 per 1,000 of the population, as compared with 1·34 in 1936 and 1·17 in 1935; it was 1·36 for the ten years ended 1936.

This represents a continuance of the decline in the tuberculosis mortality-rate recently recorded in Bootle, and set out in the following table:—

Period.	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1891-1900	1106	2·17	2·01
1901-1910	1127	1·76	1·65
1911-1920	1370	1·82	1·42
1921-1925	652	1·70	1·08
1926-1930	572	1·49	0·94
1931-1935	537	1·39	0·81
1936	102	1·34	0·69
1937	83	1·11	0·69

From the above table it may be calculated that in the last seven years the deaths from tuberculosis in Bootle have been 436 less than would have been the case if the mortality rate experienced in 1891-1900 had continued.

Dispensary Register.—A register is maintained of all cases of tuberculosis receiving public medical treatment. This Dispensary Register contains the names of all persons attending at, or seen in connection with, the Dispensary for diagnosis or for treatment of tuberculosis, including patients under general supervision (whether or not accompanied by domiciliary treatment), and patients or observation cases in residential institutions, and contacts. On December 31st 1937 the number of persons so classified and on the register was 558, as against 583 on January 1st, 1937.

PULMONARY TUBERCULOSIS.

Incidence.—One hundred and forty-three new cases suffering from pulmonary tuberculosis were notified during 1937. The number includes

17 cases not formally notified. The numbers notified in the five preceding years were 154, 173, 173, 145, and 166 respectively. In the case of five the first intimation was obtained from the death returns, while in 24 other cases notification was made at intervals of less than three months before death. The non-notified deaths, therefore, numbered 6·8 per cent. of the total of 73 deaths from pulmonary tuberculosis. Enquiry into these non-notified cases showed the omission to have been on the part of institution medical officers.

Mortality —During the year 73 deaths were certified to be due to pulmonary tuberculosis, representing a rate of 0·98 per 1,000 of the population, as compared with 1·15 in 1936 and 1·04 in 1935. The age period most affected was early adult life with 34 deaths between the ages of 15 and 35, and the usual sex disparity was shown, there having been 40 deaths among males and 33 among females.

Tuberculosis Visitors: Home Visitation.—Four tuberculosis visitors, one of whom assists in the medical work of the Dispensary, and three of whom are engaged also on work in connection with Maternity and Child Welfare, are responsible for the sanitary supervision of the homes of notified and suspected cases. Every effort is made by the Visitors to make their calls helpful to the comfort of the patient and a stimulus to the care exercised in preventing infection of others in the household. The visits totalled 2,722 (2,052 of which were for dispensary purposes) in the year under review.

Housing of Tuberculosis Cases.—A significant factor in the production of new cases of tuberculosis is the prolonged contact of young children with a patient or other inmate of the house who is suffering from pulmonary tuberculosis in an infectious stage; such prolonged contact is obviously obtained when such a case shares a bedroom with other persons. An estimate of the extent to which such a position exists in the Borough can be formed by consideration of the following table showing the sleeping accommodation, as at 31st December 1937, available for all infectious cases of pulmonary tuberculosis.

1. Number of infectious cases of pulmonary tuberculosis on Dispensary register at the end of the year	...	...	215
2. (a) Number of infectious pulmonary cases not occupying a separate bed at home	...	...	47
(b) Less number of foregoing cases in 2 (a) isolated in sanatoria and pulmonary hospitals	...	...	29
3. Net number of infectious pulmonary cases at the end of the year living at home and not occupying a separate bed			18
4. Percentage of infectious pulmonary cases at home at the end of the year not occupying a separate bed		...	8.3

Rent Assistance Scheme.—With a view to reducing the risks of child infection, the Council has since April 1935 had in operation a scheme for (a) the allotting of houses by the Housing Committee to cases of infectious pulmonary tuberculosis who contract to comply with the simple health requirements of the Tuberculosis Officer, first amongst which is the sole occupation of a bedroom by the patient, and (b) the establishment in cases so housed of a scheme of rent assistance by the Health Committee, whereby the superior accommodation, and hence the protection of the healthy members of the family, is obtained without detriment to the nutritional needs of the family.

At the end of the year there were 27 families comprised within the scheme, the total rent subsidy then being borne by the Health Committee amounting to £3 12s. 6d. weekly. Further four patients recommended awaited allocation of houses.

Tuberculosis Dispensary.—The Dispensary is the central element of the tuberculosis scheme, and serves as a clearing house from which some cases are transferred to sanatorium, others to hospital, and others to their own medical attendant for domiciliary treatment, while a certain proportion remain in attendance at the clinics held nine times fortnightly and receive necessary treatment therefrom. As far as possible, however, this last aspect of the functions of the Dispensary is limited to the provision of specialist treatment not at the disposal of the general practitioner.

During the year 272 new cases, of whom 109 were sent by private practitioners, 20 by the Public Assistance Medical Officers, 6 by the

Ante-Natal Clinic Medical Officers, and 42 by the School Medical Officers for opinion preliminary to notification, were examined at the Dispensary. Attention continued to be paid to securing the attendance for examination of contacts of notified cases, and during the year 187 were so examined.

The total attendances at the Dispensary during the year numbered 5,429, as compared with 6,127 in 1936; 625 specimens of sputum were examined, giving a positive result in 58 cases.

Radiographic Examinations.—Since the installation of an X-ray apparatus at the Health Centre in June 1934 increased use has been made of radiography in diagnosis and control of treatment. During the year the total of X-ray examinations numbered 577, and the cost of materials and maintenance (excluding electric current and capital charges) was approximately £112; this position compares with a total of 208 examinations done for the dispensary by outside authorities during 1933-34 at a total cost of approximately £224. The average number of X-ray examinations made is now 695 per 100 deaths from tuberculosis, as compared with 88 per 100 in 1931 and 556 per 100 in 1936.

Maghull Sanatorium.—During the year 41 patients were admitted to the Sanatorium with an average length of stay of 174 days for the 41 cases discharged during the year. Information is given in Section (G) on Form T.145 of the Ministry of Health on pages 82 and 83 of the results of treatment in Maghull Sanatorium and Linaere Hospital during the year.

Linaere Hospital Tuberculosis Pavilion.—During 1937, 44 Bootle cases were admitted to the Pavilion, the average length of stay of the 48 cases discharged (including 12 deaths) during the year being 180 days.

Artificial Pneumothorax Treatment.—Treatment by induction of artificial pneumothorax, in order to secure collapse of the affected lung, was adopted at Linaere Hospital first in 1924, in cases selected on lines described in the Annual Report for 1935.

Thirty-one cases have so far been considered suitable for this treatment. Ten of the cases have died, four have left the district, and a tabular statement gives the results of treatment in the other cases.

RESULTS OF ARTIFICIAL PNEUMOTHORAX TREATMENT.

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Number.	Beginning of treatment	Cessation of treatment	Length of treatment	Other treatment given	Condition to date	Time since treatment ceased
2.	18/7/25	25/4/27	21 months	Hospital	Not examined recently; known to be working	10½ years
4.	11/12/26	—	6 years	Sanatorium	In Papworth Village Settlement. Working.	5 years
6.	18/10/29	9/1/32	27 months	Hospital	In Papworth Village Settlement. Working.	6 years
13.	2/5/33	7/2/34	9 months	Hospital	Disease of chronic type; still active.	45 months
14.	27/7/33	1/9/34	13 months	Hospital	Disease arrested. Is working.	40 months
17.	21/12/34	—	—	—	Treatment discontinued 3/2/37. Disease quiescent. Working full time.	10 months
18.	24/7/35	24/9/35	2 months	—	General condition poor. Disease advancing. Unfit for work.	27 months
21.	4/10/35	—	—	—	Still having refills. Good general condition.	—
22.	5/11/35	23/11/35	Under 1 month	—	Left district 22/6/37. Working till then.	25 months
23.	5/5/36	—	—	Hospital	Left district 22/4/37. Refills continued till then.	—
24.	31/7/36	—	—	Hospital	Still in hospital; has had pyopneumothorax and external pleural fistula.	—
26.	12/11/36	—	—	Hospital	Still in hospital; aspiration and air replacement being continued.	—
27.	29/1/36	—	—	Hospital	Pneumothorax induced in Walton Institution. Refills continued since 17/4/37 at Dispensary. Satisfactory collapse and good general condition.	—
28.	5/6/37	—	—	—	Partial collapse only, with some temporary improvement. Died 26/8/37.	—
29.	14/7/37	—	—	Hospital	Pneumothorax induced in Walton Institution. Refills being continued. Partial collapse. General condition good.	—
30.	6/8/37	—	—	Hospital	Good collapse. Still in hospital.	—
31.	18/1/37	—	—	Sanatorium	Pneumothorax induced in High Carley Sanatorium; had also there internal pneumolysis and phrenic avulsion; good collapse of lung. General condition good. Refills continued at Dispensary since 11/8/37.	—

NON-PULMONARY TUBERCULOSIS.

During the year 58 new cases of non-pulmonary tuberculosis were notified, as compared with 42 in 1936 and 42 in 1935, namely:—34 glands, 13 bones and joints, 3 meningitis, 3 kidney, 2 abscess, 1 abdominal, 1 skin, and 1 enteritis; and there were 10 deaths registered. The agreement with the Leasowe Hospital for Children for the maintenance of beds for children suffering from non-pulmonary tuberculosis remained in force, and at the beginning of the year 10 cases were in hospital; 5 cases were admitted, 2 were discharged, and 1 died during the year, and twelve were remaining in hospital at end of year.

The scheme for admission to general or special hospitals of cases of non-pulmonary tuberculosis, and for payment by the Council of the charges for maintenance and treatment in cases recommended or approved by the Tuberculosis Officer, was continued; during the year 16 such patients were admitted.

Dental Treatment.—During the year 12 cases received dental treatment at a cost of £3 5s. 0d.; two cases were carried over to 1938.

Public Health (Prevention of Tuberculosis) Regulations, 1925.—No action was taken under the above Regulations relating to tuberculous employees in the milk trade.

Public Health Act, 1936, Section 172.—No action was taken under this Section dealing with the compulsory removal of cases of tuberculosis to hospital.

ARTIFICIAL LIGHT TREATMENT.

The scheme of artificial light treatment by exposure of patients to general irradiation from carbon arc lamps, which was commenced in October 1925, was continued during the year. The staff, plant and working method were as described in previous reports.

The operation time was approximately $343\frac{1}{2}$ hours for the carbon arcs and $22\frac{1}{2}$ hours for the mercury vapour lamp. The attendances made by patients totalled 2,794, of which 627 were made by patients referred under the Tuberculosis Scheme and 2,167 by patients referred under the Maternity and Child Welfare Scheme.

The attached tabular statement classifies conditions for which treatment was administered and the results obtained in the period under review.

RESULTS OF ARTIFICIAL LIGHT TREATMENT.

(a) TUBERCULOSIS.

	Under Treatment 1st Jan., 1937	New Cases	Discharged			Ceased to attend	Under treatment 31st Dec., 1937
			Much Improved	Im- proved	Station- ary		
Tubercular Cervical Glands... ..	7	6	2	1	1	1	8
Tuberculosis of Bones	1	—	—	—	—	—	1
Lupus	—	2	—	—	—	—	2

(b) MATERNITY AND CHILD WELFARE.

	Under Treatment 1st Jan. 1937	New Cases	Discharged			Ceased to attend	Under treatment 31st Dec. 1937
			Much Improved	Im- proved	Station- ary		
Rickets	21	77	3	31	1	30	33
Debility	4	27	1	15	1	5	9
Malnutrition	22	20	4	22	—	13	3
Totals ...	55	132	10	69	3	49	56

VII. VENEREAL DISEASES.

The Council's scheme for the treatment and control of venereal diseases provides for the maintenance of a treatment centre at the Bootle General Hospital, and for the conduct of pathological examinations at the University of Liverpool. In addition payment is made for services rendered to Bootle residents attending the venereal diseases treatment centres of the Liverpool City Council. At the Council's Bootle Hospital treatment centre four clinics for men and two clinics for women and children are held weekly.

The Annual Statistical Report of the Medical Officer of the Treatment Centre will be found on pages 96 to 98. It shows 357 persons under treatment on 31st December 1937, as against 349 on 1st January 1937, and an increase in new cases, the figures being 321 as contrasted with 274 in 1936.

The total attendances for treatment made at the Centre during the year show a decrease from 13,124 to 12,701; the figure includes 3,537 attendances made between clinic days for the treatment of gonorrhoea at the irrigation centre. The average attendance at the male clinics was 58, and at the female clinics was 11. In-patient days totalled 656 as against 593 during the previous year. During 1937 127 cases were discharged on completion of treatment and observation, as contrasted with 102 during 1936.

The Table below is a statement of the number of cases presenting themselves for treatment during the last five years:—

BOOTLE VENEREAL DISEASES CLINIC.

	1933	1934	1935	1936	1937
New Cases (total)	325	309	327	274	321
New Cases (syphilis)	58	74	62	50	58
Total attendances (excluding Irrigation Department)	12256	11616	11241	9633	9164
Irrigation Department attendances	3513	4035	3816	3491	3537
In-patient Days	569	676	487	593	656
No. discharged after completion of observation and treatment	107	136	137	102	127
No. who ceased to attend after completion of treatment, but before final tests as to cure	105	63	78	56	105

Bootle residents accounted for 36 per cent. of the cases under treatment at the Bootle Hospital Centre, the Authorities contributing the next largest number of cases being the Lancashire County Council with 20 per cent., and Liverpool with 15 per cent.

Against this attendance of outsiders at the Bootle Centre there may be set off the user of Liverpool Centres by Bootle residents, and the following table summarises the available information as to the total number of cases of Bootle residents dealt with at the various local centres for the first time during 1937.

	NEW CASES—BOOTLE RESIDENTS.					
	Syphilis	Soft Chancre	Gonor- rhœa	Other Condi- tions	Total	Total Attend- ances
Seamen's Dispensary ...	2	2	29	19	52	1902
Royal Infirmary ...	1	—	5	11	17	455
Bootle General Hospital	11	5	76	25	117	6282
Mill Road Infirmary ...	5	1	4	7	17	490
Total ...	19	8	114	62	203	9129

The following table sets out the change in incidence of the venereal diseases locally, in so far as it can be measured by records of new cases presenting themselves for treatment at the Bootle Centre.

	NEW CASES ANNUALLY.					
	SYPHILIS.			GONORRHOEA.		
	Males.	Females.	Total.	Males.	Females.	Total.
1921-1925	123	41	164	166	6	172
1926-1930	63	19	82	176	20	196
1931	48	16	64	160	20	180
1932	53	23	76	185	25	210
1933	43	15	58	145	26	171
1934	47	27	74	120	31	151
1935	43	19	62	135	36	171
1936	37	13	50	121	27	148
1937	44	14	58	155	31	186

When the table is examined it will be noted that there has been a large decrease in the number of new cases of syphilis since 1925, but little change in the number of cases of gonorrhœa which present themselves for treatment; it is probable that the figures represent a real fall in the incidence of syphilis.

VIII. MATERNITY AND CHILD WELFARE.

The Nature of Maternity Welfare Work.—There is a particular need at the present time for attention to all the services designed to assist maternity, because of the downward trend of the British birth rate

which, together with that of Europe generally, has been declining for more than fifty years. If this decline continues, it will lead presently to a neutralisation of the good effects of the lengthened expectation of life due to the better health of the people, and our numbers will shrink from year to year. It may be argued that a smaller population will be an advantage, but this will be true only if it is a better one. Thus from every point of view the maternity services need care and support.

From two aspects the welfare of the expectant mother needs to be safeguarded, for her own sake and that of the child. Modern knowledge is sufficient to avert or minimise the majority of the dangers of pregnancy and of the confinement, and it is, therefore, necessary only to see that it is effectively applied as widely as possible. Where there is a family practitioner he, of course, is able to give all the advice necessary during pregnancy, to superintend the confinement, and to assist if needed in the post-natal period. But many women have no private practitioner as a regular adviser, and it is for them that the services provided by the Council are intended. These fall into three divisions, the ante-natal clinic, the municipal midwifery service and the maternity home, and the post-natal clinic. Of the three, the last-named is used the least by the women of Bootle.

Ante-natal supervision exists partly to detect and advise on the correction of abnormalities; this is perhaps its most obvious function. The maintenance of health, considered not as the absence of disease but as a positive state of well-being, is another equally important aim. In addition to advice, nutrition is aided where it appears to be deficient by dried milk, at reduced price or free, and by pills and capsules containing lime, iron or vitamins A and D. These last, supplied at small cost, are often prescribed where no obvious deficiency of nutrition exists because of the added requirements of mineral salts and the means to mobilise them in the pregnant woman.

Further, the clinics exist for educational purposes in the domestic management of pregnancy and the confinement. Much real help can be given in teaching mothers how to make use of the means actually available to them, and practical assistance in this direction is given in the making of clothes and in advice on cookery.

As noted above, there is not as much advantage taken of the facilities for post-natal care as the staff would like to see. One examination, made five or six weeks after delivery, is often all that is necessary to detect slight abnormalities, which may be soon remedied, but which, if

allowed to persist, will cause various degrees of invalidism. When means of early remedy exist, it is a pity that they should not be more fully used; where no abnormality exists an examination will at least have a reassuring effect.

ANTE-NATAL WELFARE.

Home Visiting of Expectant Mothers.—A very great deal can be done to promote normal childbirth by careful instruction as to general and personal hygiene and as to the need for suitable food, open air, exercise and rest, adequate sleep, and properly devised clothing. With the institution of the Municipal Midwifery Service in July 1937, and the consequent closer co-operation between practising midwives and the Council's medical and health visiting staff, it became possible to relieve health visitors of some of the ante-natal supervision which they had formerly undertaken, and to allow the midwife engaged to assume fuller responsibility for her patient during the whole period between booking and the puerperium. The municipal midwife sees that her patients receive necessary medical care either from a private practitioner or from the clinic medical staff, and has referred to her for immediate visitation any of her patients who fail to keep a clinic appointment, for such absentees are potential emergencies who may not themselves realise the necessity for medical attention. The Health Visitors paid 1,315 home visits and the Municipal Midwives paid 577 home visits to expectant mothers.

Ante-Natal Clinics. — The ready use of the facilities provided at the Ante-Natal Clinics in Bootle for medical supervision during pregnancy is well known to the Council, and this position was maintained during 1937. It may be recalled that the first Ante-Natal Clinic was established in Bootle in 1920, in which year expectant mothers equivalent to 8 per cent. of the total number of births came under public medical supervision. During 1937 four Ante-Natal Consultations were held each week, and in all 940 new cases attended, corresponding to 57 per cent. of the total registered births; in addition, 235 cases carried over from the preceding year continued under supervision, and a total of 4,128 attendances was made, with an average of 21 persons per consultation. Further, it should be noted that patients intending to enter Walton Hospital for confinement usually attend the Ante-Natal Clinic held at that institution.

The number of patients treated during the year was 307, as compared with 326 in 1936, and the estimated cost of dentures supplied was £156 18s. 0d., of which the patients' contributions were assessed at £60 6s. 0. Eighty-eight cases were carried forward to 1938.

The following statement classifies the work done, including treatment of children under school age.

	Mothers.	Children under school age.
Brought forward from 1936	52	—
New cases	307	88
Cases completed	158	88
„ ceasing treatment	113	—
„ carried forward	88	—
Number of attendances	1,349	88
„ „ extractions	1997	121
„ „ fillings	—	—
„ „ other operations	—	—
„ „ general anaesthetics	480	56
„ „ artificial dentures supplied	199	—
„ „ treatment sessions	115	—

MATERNAL WELFARE.

Nursing Homes Registration.—There is one Nursing Home proper within the Borough, as well as three Maternity Homes, on the register at the end of 1937. Bye-laws governing the conduct of these Nursing Homes were made by the Council in November 1931.

Dental Treatment of Expectant and Nursing Mothers.—Three half-days weekly are devoted to the dental treatment of expectant and nursing mothers and the treatment given has been in the nature of extractions and the supply of artificial dentures.

The Practice of Midwives.—The number of midwives resident in Bootle on the local roll at 31st December 1937 was 18, as against 29 in the preceding year; six others, resident outside the district, also gave notice of their intention to practise in the Borough; all are trained. The above figures do not include midwives practising in the Municipal Maternity Home.

Regulations of the Central Midwives' Board require medical help to be sought by the midwife in all cases of illness of the patient, or the child, or of any abnormality occurring during pregnancy, labour, or lying-in, and 275 records of sending for medical help were received. Sixteen of the calls were an account of abnormalities during pregnancy,

206 during labour, including 71 cases of ruptured perineum, 18 during the puerperal period, and 35 for conditions affecting the child.

The Council accepted responsibility for the payment of private midwives' fees in approved necessitous cases to June 30th 1937, and applications in respect of this service were considered with full information as to the family income and outgoings. The number of applications granted was 53 for this half year, as compared with 111 for the year 1936.

Under the 1918 Act the Local Supervising Authority is responsible for the payment of fees to doctors called in by midwives, and last year 206 accounts, totalling £336 4s. 3d., in respect of cases where the doctor himself was unable to recover the fee, were sent in, as compared with 215 accounts, totalling £284 6s. 6d., in 1936. In respect of this sum, the contributions to be recovered from the patients were assessed at £65 2s. 3d.

Midwives Act 1936, Section 5.—This section empowers midwives to surrender to the local supervising authority their certificates issued by the Central Midwives Board at any time until 31st July 1939, and empowers local supervising authorities to require surrender of such certificates in special circumstances; in all cases compensation based on past receipts from practice is payable. During 1937 five midwives made voluntary surrender of their certificates, and two were required to surrender them on account of age or infirmity; compensation payable amounted to £1,754 2s. 3d., of which £57 10s. 4d. was recovered from neighbouring local supervising authorities in whose areas the midwives concerned had also practised.

Milk Assistance Scheme.—The Council's Milk Assistance Scheme, under which dried milk is granted on the Clinic Medical Officer's recommendation, to infants, and to expectant and nursing mothers, in necessitous cases falling within a certain income scale, continued in force. In all, milk to the value of £1,095 1s. 9d., and cod liver oil emulsion to the value of £112 8s. 4d., making a total cost of £1,207 10s. 1d., were granted by the Council to infants and to nursing and expectant mothers, on the advice of the Medical Officer, as compared with £1,067 6s. 11d. in 1936.

Obstetric Consultations.—In 1926 the Council inaugurated a scheme for the services of a Consultant Obstetric Surgeon to be available to private practitioners in cases of puerperal sepsis, and in 1931 this service was extended to provide for the attendance of the Consultant, at

the request of private practitioners for consultation, at the patient's own home, in respect of conditions arising (a) during pregnancy or puerperium, and (b) at parturition.

During the year consultations were asked for on two occasions during pregnancy, on five occasions during the puerperium, and on six occasions during parturition.

Institutional Provision for Maternity Cases.—As is the case elsewhere, an increasing number of mothers choose to go into public institutions for confinement, and last year 556 patients were delivered in Walton Hospital at the cost of the Public Assistance Committee, and 158 patients were delivered in the Municipal Maternity Home; in addition 55 patients were delivered in voluntary hospitals. The total of 769 represents 47 per cent. of the births registered during the year, as compared with 43 per cent. during 1936.

Maternity Home. — During the year 1937, 161 patients were admitted to the Maternity Home, the average duration of stay being 14 days; admissions in 1936 numbered 171. Two cases were treated for ante-natal supervision, 114 cases were delivered by the nursing staff, and 44 cases were delivered by doctors. Medical assistance was called in by the Matron on six occasions during labour, 23 times for rupture of the perineum, twice during the puerperium, and on one occasion on account of the condition of the infant. Three cases were notified as puerperal pyrexia. There were no cases of ophthalmia neonatorum. All the cases but five left the institution with their babies being breast-fed.

Cases delivered by forceps numbered 6, or 3·8 per cent., as compared with 29·5 per cent. in a recently prepared examination of 14,614 cases delivered in private medical practice.

There were 6 foetal deaths (still-born or dying within 10 days of birth), in 4 of which the child was still-born.

One hundred and five of the patients were admitted in respect of their first confinement, and there were 28 cases of readmission to the Home of former patients, of whom eight were admitted for the third time, and one for the fourth time. There was one set of twin births.

Post-natal Supervision of the Mother. — Medical examination of mothers a few weeks after delivery, locally first instituted in 1929, has been continued, although the acceptance of the offer of such exami-

nation and supervision shows no tendency to increase; during the year 59 patients, including two after abortion, attended post-natal clinics, as compared with 71 in 1936.

Advice on special or general matters of hygiene was given to all the patients and simple treatment was prescribed for such commonly occurring conditions as anaemia, debility, and constipation. Where examination disclosed conditions requiring further investigation or treatment, the patients were referred to the appropriate agencies, including 5 references to hospital, 5 to the Mothers' Welfare Clinic, and 4 to the Dental Clinic.

Puerperal Morbidity and Mortality. — Eleven cases of puerperal pyrexia were notified during the year. Three deaths were registered from puerperal fever, and there were three from other diseases and accidents of pregnancy and parturition; the causes of death were registered respectively as (1) Post-partum eclampsia, (2) Post-partum haemorrhage, retained placenta, third pregnancy, confinement, full-time live birth, and (3) General peritonitis, confinement, full-time birth.

The circumstances of the confinements were investigated by the Medical Officer of Health, and confidential reports (not identifying the patients) were sent to the Departmental Committee on Maternal Mortality set up by the Ministry of Health.

The six deaths thus classified to pregnancy and child-birth give a maternal mortality rate of 3·65 per 1,000 (live) births, and the following table shows that although there have been fluctuations in this rate, the local experience has been more favourable than that of the country as a whole.

MATERNAL MORTALITY.

Deaths classed to pregnancy and childbearing.

Period.	BOOTLE.		ENGLAND & WALES.
	No. of Deaths.	Rate per 1,000 (live) Births.	Rate per 1,000 (live) Births.
1911-1920	66	3·13	4·07
1921-1925	31	3·10	3·90
1926-1930	26	2·73	4·28
1931	7	4·20	4·11
1932	6	3·39	4·21
1933	6	3·63	4·51
1934	7	4·26	4·60
1935	2	1·22	4·00
1936	4	2·37	3·81
1937	6	3·65	3·23

MUNICIPAL MIDWIFERY SERVICE.

The last Annual Report contained full details of the Council's proposals for complying with their obligation under the Midwives' Act, 1936, to secure the employment of whole-time midwives for attendance on women in their own homes, and eight midwives were duly appointed, after interview of all midwives resident and practising in Bootle who made application, and took up duty on 1st July 1937. In one case removal of an appointee to another part of the town was necessary, and an appropriate rent-subsidy was granted. The close personal relationship between midwives and patients formerly existing has been maintained by continuing arrangements for booking patients direct without office intervention, and the customary fees for the area continue to be charged, although remissions are allowed in accordance with family needs and income; collection of fees is satisfactory, and on 31st March, 1938, the outstanding arrears constituted 10 per cent. only of sums due. The staff attended 253 cases in the half year ended 31st December, and booked 191 cases in the first quarter of 1938—the estimate made in March 1937 for cases to be attended by Municipal Midwives in a full year was 700.

INFANT WELFARE.

The Nature of Infant Welfare Work.—Attention may be drawn to the fact that infant welfare work in no way replaces or usurps the work of the general practitioner but is complementary to it. The medical officers discourage the idea that the clinic is virtually an out-patient department set up to displace the family doctor, and a child not sufficiently well to attend an infant clinic is referred for the attention of the family doctor or the hospital.

A vast amount of work requires to be done in the sphere of child health, and its performance must result in a decrease in invalidism and an increase in human happiness. There is no department of social medical service which has such valuable consequences, and infant welfare truly may be described as the key to personal and national health. How much of the time of medical officers and health visitors now taken up in remedying or minimising the ill-effects of disease could be devoted to teaching the principles of health depends largely upon the completeness of co-operation of the parent with the personnel of the maternity and child welfare service.

Unfortunately, one still meets mothers who appear to think that a child, on being weaned, will continue to grow without further attention although perhaps they will admit that its existence may unhappily be

punctuated by the occurrence of inevitable maladies which in some miraculous way cease when the child reaches the age of seven years; this haphazard idea of infant management implies a belief in a world where the human organism and its environment are totally dissociated. Such a view is, of course, much less common than was formerly the case, but varying degrees of fatalism, prejudice, ignorance, poverty, and indifference, are still encountered either singly or in combination, and form, as elsewhere, a hindrance to social progress.

Although infant mortality figures are extremely instructive in providing an index of the value of preventive medicine in the realm of infant welfare, the fact that the infant mortality rate includes the neonatal death-rate, a reduction in which appears to be intimately associated with improved ante-natal and intra-natal care, means that this measure does not adequately express the value of the infant consultation and the health visitor in saving young lives. Apart from this is the failure of the mortality rate to indicate the more positive role of infant welfare work. Health therefore really requires to be assessed in terms of physiological development and fitness rather than as a decline in infant mortality and morbidity rates; the former index denotes the failure to preserve life and the latter the limitations of past and present efforts to prevent disease.

Notification of Births.—The number of live births notified was 1,126; 69 were births to parents who normally resided outside the Borough. 1,106 notifications were received from midwives and 20 from doctors and parents. In addition 606 transfers of live births and 32 of still births to Bootle parents in Liverpool institutions were received. There were 37 still-births notified (including 5 to non-Bootle residents).

The babies were visited shortly after birth by the Infant Welfare Visitors, unless it was considered that suitable advice could be obtained from other sources. A summary of the work of the Infant Welfare Visitors is given on page 99.

Births Registered.—The number of live births registered in the district was 1,140, from which 102 are to be deducted as born in Bootle to residents of other districts, and to which are to be added 602 births to Bootle parents temporarily out of the town; the corrected figure is therefore 1,640. Of the number registered 63 were illegitimate.

Still-births.—The number of still-births registered in the district was 37; this figure corrected for 37 inward and 5 outward transfers gives

a net total for the year of 69, as compared with 67 for 1936. As full an investigation as possible has been obtained in respect of each such case, and 22 of the foetuses were forwarded for pathological examination.

To obtain a complete picture of the true position as to infant mortality the still-births (which include deaths of infants both before birth and during the act of birth) should be added to the deaths of infants in their first twelve months of independent existence, and the following table is given with that end in view:—

Year.	DEATHS OF INFANTS.					
	Still Births.		Post-Natal.		TOTALS.	
	No.	Rate	No.	Rate	No	Rate
1926 ..	63	32	187	100	250	129
1927 ..	58	31	141	78	199	106
1928 ...	53	29	186	107	239	133
1929	65	38	138	83	203	118
1930 ...	84	45	141	79	225	120
1931 ...	64	38	159	95	223	134
1932 ...	92	52	152	86	244	138
1933 ...	76	44	146	88	222	132
1934 ...	71	41	126	77	197	118
1935 .	79	46	150	92	229	138
1936 ...	67	40	115	68	182	108
1937 ...	69	42	127	77	196	119

Infant Deaths.—There were 127 deaths of infants under the age of twelve months, which total expressed as a rate per 1,000 births gives an infant mortality rate of 77, compared with 68 during 1936.

The trend of infant mortality in recent years is set out in the table below:—

Years.	BOOTLE	England and Wales
1901-05	166	138
1906-10 '	130	117
1911-15	133	110
1916-20	103	91
1921-25	91	76
1926-30	89	68
1931-35	87	62
1936	68	59
1937	77	58

The rise during the year under review in the infantile mortality rate was a feature mainly of the second and third quarters; the quarterly totals of deaths were 28, 38, 28, and 33 respectively, as compared with 40, 26, 16, and 33 in the corresponding quarters of 1936.

The most important of the causes of death, which are given in detail on page 78, were:—prematurity 30, bronchitis and pneumonia 29, diarrhoea and enteritis 12, convulsions 11, congenital malformation 9, whooping cough 7, atrophy debility and marasmus 6, and meningitis 5.

The rate of infantile mortality among legitimate infants was 77, and among illegitimate infants it was 95. In conformity with the usual experience the mortality rates for males were higher than those for females both during the first four weeks and in the subsequent months.

The infantile mortality rate was uneven throughout the various wards; the approximate rates were:—in Mersey 114, in Linacre 103, in Knowsley 89, in Orrell 89, in Derby 47, and in Stanley 28, respectively.

Infant Mortality in Lancashire County Boroughs.—The Medical Officers of Health of other Lancashire County Boroughs have kindly supplied me with the information enabling me to compile the following list of infant mortality rates per 1,000 births during 1937:—

Town.	Infant Mortality Rate.	Town.	Infant Mortality Rate.
Rochdale	53	Burnley	75
Bury	55	Manchester	76
Blackpool	58	BOOTLE	77
Bolton	61	Preston	77
Southport	67	Liverpool	82
Blackburn	69	Salford	84
Oldham	69	St. Helens	88
Barrow-in-Furness..	71	Wigan	90

Neo-Natal Mortality.—Thirty-nine children died before they were a week old, and a total of 47, or 37 per cent. of all the deaths under one year, occurred in children under the age of one month. This is a

neo-natal mortality rate of 28·7 per 1,000 births. The following table taken in conjunction with the preceding table of infantile mortality shows clearly that the decline of mortality in the first year of life has been much less during the first month. It has been well pointed out in this connection that as the proportion of deaths of the “unfit,” or those born with defective stamina, will obviously be greater in the first than in the last months of the year, the lives saved by modern infant welfare practice are proportionately more numerous among the “fit” than the “unfit.”

DEATH-RATES PER 1,000 BIRTHS OF INFANTS UNDER FOUR WEEKS.

Years.	BOOTLE.	ENGLAND AND WALES.
	Deaths per 1,000 Births.	Deaths per 1,000 Births.
1906—1910	37·0	40
1911—1915	39·2	39
1916—1920	32·3	37
1921—1925	34·2	33
1926—1930	32·7	32
1931—1935	36·9	32
1936	35·5	30·2
1937	28·7	

Public Health (Ophthalmia Neonatorum) Regulations, 1926 to 1937.—Nine cases of ophthalmia neonatorum were notified during the year compared with 9 in 1936 and 11 in 1935; the rates per 1,000 births being 5·5 for 1937, 5·3 for 1936, and 6·7 for 1935. The disposal of the cases and the results are shown in the table below:—

Cases.			Vision Unimpaired.	Vision Impaired.	Removed from Area	Still under Treatment at end of year.	Total Blindness.	Deaths.
Notified.	Treated.							
	At Home.	In Hospital						
9	9	—	7	—	1	1	—	—

Under the Public Health Act, 1936, Sec. 176, conferring powers for the prevention of blindness or for the treatment of persons suffering from disease or injury to the eyes arrangements have been continued with St. Paul's Eye Hospital, Liverpool, for the reception with their mothers, of new-born infants suffering from inflammation of the eyes.

Home Visitation of Infants.—There are nine officers on the health visiting staff, of whom one devotes her time to general clinic supervision and to certain special duties; two give half their time to tuberculosis visiting, and two give one-half of their time to the School Medical Service; the establishment is, therefore, equivalent to 7 visitors giving their whole time to Maternity and Child Welfare duties. This staff paid 7,789 visits to infants under one year, an average of five to each infant, as compared with 6,520 during 1936.

Infant Welfare Clinics.—During 1937 the medical and health visiting staffs were increased and a toddlers' clinic and two additional infant clinic sessions were established, making a total of nine consultations weekly. This expansion of the service was in response to the increasingly evident necessity for a more adequate supervision of the young child, and was further required in order to relieve congestion at the existing clinics. It is obvious that as attendances at the centres increase the medical officers and health visitors find less time to give to individual children, and if numbers exceed a certain point the routine duties take up so much time that the all-essential educative side of the work suffers and examinations must become more or less perfunctory.

The following tabular statement shows the numbers of new infants presented for examination and advice, together with total yearly and average attendances at each Centre:—

Clinic,	New Cases.			Attendances.				
	Under one year.	One to three years.	Total.	Under one year.	One to three years.	Total.	No. of Sessions	Average attendance at each.
<i>Health Centre—</i>								
Monday afternoon ...	209	74	283	3541	458	3999	48	83
Tuesday morning*...	65	16	81	939	84	1023	30	34
Wednesday afternoon	233	82	315	3543	681	4224	50	84
Thursday morning...	113	50	163	1901	377	2278	51	45
Thursday afternoon..	199	41	240	2838	368	3206	51	63
<i>Balliol Road Centre—</i>								
Tuesday afternoon ...	202	61	263	4059	495	4554	52	88
Wednesday morning	101	27	128	1999	448	2446	51	48
Thursday afternoon†	39	10	49	328	39	367	13	28
Totals ..	1161	361	1522	19148	2950	22097	346	64

*from June 8th 1937.

†from September 30th 1937.

Education in mothercraft, which is the prime function of the Infant Welfare Clinics, was continued during the year, and included special talks given by the Health Visitors to groups of mothers at the Clinics held at the Health Centre; these talks formed part of a considered syllabus dealing with the principal points in infant hygiene.

YOUNG CHILD WELFARE.

Young Child Mortality.—The improvement in health which has been so marked during the last twenty years in infants has to some extent drawn attention from the equal or greater advance in the health of young children over the age of twelve months. The following table, however, shows clearly a surprisingly large reduction in the mortality of children in their second and subsequent years.

MORTALITY PER 1,000 LIVING IN EACH OF THE FIRST FIVE YEARS OF LIFE.

Year.	Under 1 Year	1—2 Years.	2—3 Years.	3—4 Years.	4—5 Years.	0—5 Years.	1—5 Years.	2—5 Years.
1911	145	57·2	—	—	—	56·0	25·0	14·1
1921	96	38·0	—	—	—	39·6	19·8	11·6
1929	83	42·1	16·3	8·9	1·8	31·0	16·7	8·8
1930	79	24·2	7·4	6·9	3·8	26·3	10·4	6·0
1931-1935	88	23·6	11·6	8·1	5·5	29·2	12·2	8·4
1936	68	19·2	6·7	2·0	3·9	21·5	7·9	4·2
1937	77	8·3	11·8	4·1	4·1	22·7	7·1	6·7
England & Wales 1935	60	9·6	4·6	3·4	3·0	16·1	5·1	3·7

Medical Supervision.—Recently attention has been given to the potential gap in medical supervision between infant life and school age, and the high morbidity figures in school entrants led to the institution in June 1937 of an experimental Toddlers' Clinic to which children aged 2-5 years might be brought for the purpose of a series of routine examinations. Toddlers attending the other Infant Clinic sessions are also so examined, because it is appreciated that a mother may find it difficult to attend a Toddlers' Clinic when she already attends the Centre with a younger child on another day. Except where defects exist which require continued supervision toddlers require to be seen only at relatively infrequent intervals, and taking into account the high average

attendances at Infant Welfare Clinics one might reasonably expect that contact with the Centre would be maintained by far greater numbers than is the case at present. The number of toddlers attending is, however, only a small fraction of the child population known to be in that particular age-group, and the fact remains that many infants are lost sight of by the medical staff until they are seen during their first year at school, when disease may be already established in, and have produced damage to, the developing child's body.

The examination of school entrants reveals gross defects which a continuity of supervision in pre-school life would often prevent or certainly expose at an earlier or curable stage, and the adequate treatment of which would lead to a great improvement in the health of the individual in later life. The purpose and ideal of the scheme is so to improve the nurture of the child that the structure and function of the body are preserved and health is maintained.

Much valuable work by way of instruction in hygiene, clothing, etc., in addition to medical, dietetic and other advice, is given, and the clinic affords an excellent medium whereby diphtheria immunisation propaganda is carried out. Ultra-violet therapy, remedial exercises, convalescent home treatment, and extra nourishment are recommended in necessitous cases. Leaflets and copies of "Better Health," many articles in which have stressed the value of the care of the young child, are distributed, and where treatment at special clinics has been found necessary, children have been referred thereto.

The service is there, and if its acceptance by mothers is at present disappointing, the remedy does not lie entirely in the hands of the welfare authority.

During the year children under one year of age made 19,148 attendances, and children aged one to five years made 2,950 attendances at the Infant Clinics, and 88 children made 370 attendances at the Toddlers' Clinic.

Supervision by Health Visitors.—During the year the Health Visitors paid 9,281 home visits to children from one to five years, infants in their second year receiving on the average over two visits each, and children between two and five years receiving one visit each,

Convalescent Home Provision.—The usual provision was made in the Maternity and Child Welfare Sub-Committee's estimates for grants towards the cost of convalescent home treatment for children under the age of five years, because of the fact that child health would be much improved by acceptance of the routine of good food, open air, exercise, and rest, practised in the modern convalescent home. The position in this regard showed further improvement during the year, 35 children under five years of age and 103 children over that age receiving convalescent treatment, with the result that additional financial provision has been necessary during 1938.

Nurse Children.—The powers in respect of the reception of children under the age of nine years for reward conferred on the Council by the Children and Young Persons Act, 1932, are administered through the Health Visitors, who supervised the general health and well-being of 11 such children who were on the register on 31st December last.

Boarded-out Children.—At the end of the year two children only were on the Register of Children boarded-out by the Council under Part VI. of the Public Assistance Order, 1930.

The Liverpool Child Welfare Association. — This Association has continued to send workers one morning each week to the School Medical Offices to facilitate the arrangements for dealing with recommendations of the medical staff of the Council or private doctors for the provision of surgical appliances, cod liver oil, extra nourishment, or convalescent home treatment, to infants and school children.

IX. HEALTH EDUCATION.

Health Education, which is increasingly recognised to be an important function of the Health Services of the borough, was actively carried on during the year. The Council's medical staff addressed several meetings, and a special public lecture with film demonstration was given in the Town Hall under the auspices of the British Social Hygiene Council; in addition, the Health Visitors continued to give health talks three times weekly to mothers in attendance at the clinics, in supplement of the more special instruction on the topic of the moment in the homes.

The local edition of 2,000 copies of "Better Health" was circulated monthly, and the medical and nursing staff of the department contributed a special page to each issue, and during the year dealt with the following matters:—"On the taking of medicine"; "Growing fit"; "The Health of the School Child in Bootle in 1936"; "Tuberculosis"; "A few Don'ts for Mothers"; "The Health of Bootle in 1936"; "Teeth—How to keep them and avoid toothache"; "The Value of Good Eyesight"; "The care of the Toddler"; "Diphtheria Prevention"; "Habits," and "Cancer."

Advantage was also taken of the scheme organised some years ago by the Central Council for Health Education for the regular supply and display of poster designs from the various national organisations having special interests such as maternity and child welfare, tuberculosis, the milk supply, smoke abatement, and venereal diseases.

Finally, full co-operation was given to the National Campaign initiated in October by the Ministry of Health and the Board of Education to encourage the wider use of Health Services. In connection with the Campaign 14 poster boards were erected on special sites throughout the Borough for the exhibition of 16-sheet double crown posters on various aspects of health services, a special subject being dealt with each month; in addition 60 smaller posters were displayed each month on other hoardings and notice boards. Further, each month 350 posters were exhibited in various school classrooms, 6,000 folders were distributed through the schools and clinics, and 6,000 book-marks were obtained for distribution through the public libraries.

X. NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home. — The services of the Bootle District Nurses' Association are available for the nursing in their own homes of patients suffering from puerperal fever, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, pneumonia, and poliomyelitis; information as to cases requiring such attention is mainly derived from the health visiting staff, and the financial arrangements with the Association provide for payment by the Council of an annual retaining fee of £35, together with a charge of 8d. per visit in approved cases. The classification of such work by the District Nurses' Association follows:—

		Carried over from 1936	New Cases	Total	Total Visits	Transferred for treat- ment to Hospital	Died	Im- proved	Under treatment at end of 1937
Discharging eyes ...	...	—	65	65	880	2	—	61	2
Pneumonia ...	...	—	43	43	698	1	2	37	3
Tuberculosis ...	...	1	6	7	216	—	4	1	2
Worms ...	...	—	27	27	185	1	—	25	1
Diarrhoea ...	...	—	13	13	132	2	—	11	—
Bronchitis ...	...	—	6	6	90	—	—	6	—
Other diseases ...	...	—	39	39	601	—	—	38	1
		1	199	200	2802	6	6	179	9

Midwives.—Twenty-eight midwives, excluding those practising in local municipal maternity homes, signified their intention to practise within the district during the year commencing 1st January 1937; as from 1st July 1937 eight of these were appointed to the Municipal Midwifery Service.

Hospitals.—The Bootle General Hospital (100 beds) is the only general hospital situate within the Borough boundary, but the Liverpool voluntary hospitals (both general and special) are also attended by Bootle residents.

Other institutional accommodation for the sick is obtained, as explained elsewhere in the Report, by agreement with the Liverpool City Council for reception into their institutions of sick persons, resident in the Borough, for whom other provision is not at the time available.

Clinics and Treatment Centres.—The Clinics and Treatment Centres under the control of the Local Authority remain as described in the Annual Report for 1932, with the addition of two infant clinics, and one toddlers' clinic.

Ambulance Transport.—The following is the existing ambulance provision available for residents in the borough:—

1. *Ambulances for removal of cases to transferred hospitals in Liverpool.*—The agreement with the Liverpool City Council for the reception of sick in the transferred hospitals provides also for the removal of cases, when required, from their homes to such hospitals by ambulances of the Liverpool City Council. The charge for this ambulance is included in the patient-week costs, a portion of which may be assessed to be recovered from the patient or his relatives.

2. *The Bootle General Hospital* maintains three ambulances for the removal to that hospital of cases mainly of street or works accidents in Bootle or the neighbourhood.

A charge of half a guinea is made to a person calling an ambulance in respect of journeys inside the Borough and of one guinea in respect of journeys outside the Borough.

3. *The Merseyside Hospitals Council* maintains an Ambulance Service for conveyance of in or out-patients from Bootle to voluntary hospitals in Liverpool and Bootle at the request of medical attendants, the doctor concerned having, of course, previously made arrangements with such a hospital for a bed. This service is a day-time service, and the ambulances of the Bootle General Hospital above mentioned take its place from 11 p.m. to 8 a.m. and on Sundays and Bank Holidays. No charge is made by the Merseyside Hospitals Council for the transport of contributors to the Penny in the £ Fund and their dependents.

XI.—HOUSING.

Housing Progress during 1937. — During 1937 no houses were erected under municipal housing schemes, but forty were erected by other bodies and persons. The table below demonstrates the progress made with new housing provision during recent years:—

Houses Erected				by Local Authority	by Private Enterprise	by Private Enterprise assisted by Corporation on Corpora- tion land
Number of houses completed during 1920				26	—	—
" " " 1921				76	5	—
" " " 1922				200	—	—
" " " 1923				—	5	—
" " " 1924				2	—	—
" " " 1925				88	8	—
" " " 1926				84	—	—
" " " 1927				172	9	—
" " " 1928				305	—	—
" " " 1929				346	6	—
" " " 1930				348	—	—
" " " 1931				394	—	—
" " " 1932				176	46	11
" " " 1933				79	17	104
" " " 1934				26	44	286
" " " 1935				172	157	206
" " " 1936				139	136	78
" " " 1937				—	25	15
Totals				2633	453	700

During the year 5 houses were demolished.

Housing Applications in 1937.—New or renewed applications for municipal houses are constantly being received, and the table below classifies the 806 applications now on the register from non-householders resident in the Borough.

HOUSING CIRCUMSTANCES OF APPLICANTS FOR MUNICIPAL HOUSES ON
DECEMBER 31ST 1937.

	Number living in 1 Room	Number living in 2 Rooms	Number living in 3 Rooms	Number living in 4 Rooms	Number living in 5 Rooms	Number living in 6 Rooms	Totals
Husband & Wife	79	230	19	—	—	—	328
„ + 1 child	35	141	6	2	—	1	185
„ + 2 children	24	81	13	—	2	—	120
„ + 3 „	11	33	10	5	—	1	60
„ + 4 „	7	14	7	1	1	—	30
„ + 5 „	3	5	3	3	1	—	15
„ + 6 „	—	8	1	—	—	—	9
„ + 7 „	—	3	1	—	1	—	5
„ + 8 „	—	2	1	—	—	—	3
Widow or Widower	2	—	—	—	—	—	2
„ + 1 child	4	7	2	—	—	1	14
„ + 2 children	3	7	4	—	—	—	14
„ + 3 „	—	3	2	—	—	—	5
„ + 4 „	2	2	2	—	—	—	6
„ + 5 „	—	—	1	—	—	—	1
„ + 6 „	1	—	—	—	—	—	1
„ + 7 „	—	1	—	—	—	—	1
„ + 8 „	—	—	—	—	—	—	—
Single Person	7	—	—	—	—	—	7
Totals	178	537	72	11	5	3	806

Improvement Areas.—The three improvement areas declared at intervals since 1932 received some 400 inspections at regular intervals throughout the year, and the by-laws were found to be observed with certain minor exceptions. One important change in the supervision of these areas is to be noted in that the Housing Act 1935 substituted the standard of the Act as to “permitted” numbers for that prescribed by the by-laws; the new standard is in general more stringent, and those houses which were consequently classified as overcrowded were included in the return made of the housing surveys of the Borough.

Housing Act, 1936, Sec. 9.—During the year a total of 249 houses was inspected under the above Section, the property being distributed in Wards as follows:—Knowsley Ward 57, Mersey Ward 21, Derby Ward 129, and Linacre Ward 42.

In many cases the work carried out has been of an extensive nature and great improvements have been effected.

The progress made in regard to action taken under Sec. 9 at the end of December 1937 can be summarised as follows:—

Number of houses inspected	...	...	...	...	...	2331
„ „ „ in respect of which informal notices were served	...	...	...	...	...	2331
„ „ „ at which work was completed as a result of informal notices	...	...	...	...	...	1786
„ „ „ in respect of which Statutory notices were served	...	...	...	...	...	292
„ „ „ at which work was completed as a result of Statutory notices	...	...	...	...	...	264
„ „ „ at which work was in progress	...	...	...	...	...	171
„ „ „ at which work was not commenced	...	...	...	...	...	110

Pleasant View Clearance Area.— Previous annual reports have recorded the clearance in 1936 of the Pleasant View area, the only area in the Borough requiring clearance, and Miss Scattergood, the Housing Estates Manager, has now supplied the following notes on the position of the rehoused families after the lapse of two years:—

(1) The placing of all the families in new Corporation houses was done by the Housing Estates Manager with as much regard as possible for the needs and requests of the families concerned.

58 families were rehoused in "A" Site, Marsh Lane, between 12th December 1934 and 4th March 1935.

9 families were rehoused in "B" Site, Bulwer Street, in June 1936.

9 families were rehoused in "B" Site, Pleasant Street, in June, 1936.

1 family found alternative accommodation for itself.

1 aged person shared a Corporation house with another old person.

78 total number of families displaced.

The following statement is satisfactory evidence of the permanent character of the rehousing effected after clearance:—

56 families remain in "A" Site, Marsh Lane, in March, 1938; the Council served Notice to Quit on the two families who have left, owing to the unsatisfactory nature of the tenancies.

8 families remain in "B" Site, Bulwer Street.

1 single man who had to be rehoused alone has given up his tenancy.

9 families remain in "B" Site, Pleasant Street.

(2) A system of granting rebates on rent, based on family need and income, is in operation, and there are 41 beneficiaries; 31 families receive rebates in Marsh Lane (10 of these pay the minimum rent of 6/- per week), and 10 families receive rebates in Bulwer Street and Pleasant Street (4 of these pay the minimum rent of 6/- per week).

The rent arrears at present stand at 2 per cent. of the annual rentals for 1937-38. In the majority of cases the rent is now being paid regularly; about half the outstanding arrears are owed by nine families who are related, and who are "bad payers."

On the whole the general position regarding rent payments is quite satisfactory for a clearance scheme.

(3) The satisfactory way in which the tenants have settled down in their new homes is a matter for gratification; there is only one tenant who persists in her dislike of her new house, and many of the others have expressed their appreciation of the better accommodation. The fact that the tenants have been rehoused in groups, and mainly near their old shopping centres, etc., has of course contributed largely to this position.

It cannot be said that the house fittings are misused, but in certain cases they are not used at all, e.g., gas fires in bedrooms, which the tenants state are too expensive, and others are not used as much as they should be, e.g., gas coppers and baths.

The gardens in general are very creditable, and there are only about three or four cases where little or no effort at upkeep is made. Many of the tenants take great pride in them, and the gardening competitions, which have already been held, have been very successful.

From the inspections that have been made of all the rooms in the 76 new houses, it is possible to observe an improvement in the standard of cleanliness maintained, with the exception of those occupied by about a dozen families who seem to be incorrigibly dirty. In about thirty of the families this improvement has been marked, which is encouraging, although the standard attained is not yet very high.

HOUSING STATISTICS.

I. *Inspection of Dwelling-houses during the Year.*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	2332
(b) Number of inspections made for the purpose	8443
(2) (a) Number of dwelling-houses (included under subhead (1) above) which were inspected, and recorded under the Housing Consolidated Regulations, 1925	249
(b) Number of inspections made for the purpose	3267
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	2278

II. *Remedy of Defects during the year without Service of formal Notices.*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1474
--	------

III. *Action under Statutory Powers during the Year.*

A. Proceedings under sections 17, 18 & 23 of the Housing Act, 1930—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	13
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) by owners	9
(b) by Local Authority in default of owners	—

B. Proceedings under Public Health Acts—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	396
(2) Number of dwelling-houses in which the defects were remedied after service of formal notices—	
(a) by owners	380
(b) by Local Authority in default of owners	—

IV. *Housing Act, 1936—Part IV. Overcrowding—*

(a) (i) Number of dwellings overcrowded at the end of the year	623
(ii) Number of families dwelling therein	623
(iii) Number of persons dwelling therein	4197
(b) Number of new cases of overcrowding reported during the year ...	87
(c) (i) Number of cases of overcrowding relieved during the year ...	238
(ii) Number of persons concerned in such cases	1537
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	Nil
(e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report ...	—

XII. BLIND WELFARE.

The duties of the Council under the Blind Persons Act, 1920, are administered in accordance with a revised scheme and regulations which received the approval of the Minister of Health in April 1934.

Registration.—During the year the Ophthalmic Surgeon held 16 clinics and examined 63 cases; and also examined two cases at home, owing to physical disability which prevented attendance at the clinic. Of this total of 65 examinations 21 were added to the register of blind persons, and there were also five transfer cases added. Twenty-five names were removed, 18 owing to death, and 7 to removal outside the Borough, leaving a total on the register at the end of 1937 of 169 persons as compared with 168 last year.

The age and sex classification of the 169 persons referred to is as follows:—

Age Group.				Males.		Females.		Total.
0—5	years	...	...	—	...	—	...	—
5—16	„	...	...	5	...	2	...	7
16—21	„	...	...	1	...	—	...	1
21—30	„	...	...	10	...	5	...	15
30—40	„	...	...	7	...	6	...	13
40—50	„	...	...	9	...	10	...	19
50—60	„	...	...	5	...	13	...	18
60—70	„	...	...	17	...	25	...	42
Over 70	years	...	...	12	...	42	...	54
Total				...	66	103	...	169

The number of persons on the register in January 1926 was 81, and comparison of the age classification then and now shows that the increase is almost entirely at ages over 40—thus, the numbers at ages 40-50 were 4 as against 19 in 1937; at years 50-60 they were 8 and 18; at ages 60—70 they were 14 and 42; and over 70 years 21 and 54, respectively.

Employment and Instruction. — The registered blind are assisted and supervised by a Home Teacher giving the whole of her time to work in the Borough; during the year the Home Teacher paid 1,564 visits, gave 766 lessons at home, and disbursed the weekly money payments to necessitous cases. In addition classes were established in the

autumn in knitting and weaving for women, and in basket-making for men; the classes are well attended and are much appreciated.

The Home Teaching Society on December 31st 1937 was assisting 133 unemployable blind with money grants at a total weekly cost of £98 14s. 9d., the amount of relief being given varying from 5/- to 25/- weekly, with the maximum amount of 25/- being paid in 25 cases. In addition eleven persons (9 males and 2 females) are employed at the Blind Workshops.

During the year 35 applications for the certification of blindness in order to take advantage of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926, were granted.

Domiciliary Medical Attendance.—In May 1937 the Council instituted a Domiciliary Medical Service for the (non-insured) registered blind by arrangement with local medical practitioners who agreed to enter their names on a panel and to provide medical attendance for a capitation fee of the same amount as that obtaining under the National Health Insurance Acts; necessary prescriptions are dispensed by a similar panel of private chemists. The scheme works smoothly and satisfactorily, and the cost to the Council for the financial year 1938-39 is estimated to be £75.

Prevention of Blindness.—In August, 1937, the Ministry of Health issued Circular 1621 drawing the attention of the Council to the importance of taking steps to prevent blindness and impaired eye-sight. It is satisfactory to note that the points dealt with had already been receiving adequate attention locally, but the Council decided to comply with the suggestion made to adopt a formal scheme for the prevention of blindness. The Scheme, approved and adopted by the Council on 1st December 1937, provides for:—

- (a) voluntary notification of persons threatened with blindness.
- (b) systematic visiting and treatment of such persons.
- (c) provision of treatment for prevention of blindness at hospitals or clinics.
- (d) provision of financial assistance to enable cases to take advantage of such facilities.
- (e) power to obtain whole or part of cost of such treatment from the patient.
- (f) dissemination of information relating to prevention of blindness.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1937 AND PREVIOUS YEARS.

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YEAR.	Population estimated to middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Un- corrected Number.	Nett.		Number.	Rate.*	of Non- residents registered in the District.	of Resi- dents not registered in the District.	UNDER ONE YEAR OF AGE		AT ALL AGES.	
			Number.	Rate. 5					Number.	Rate per 1,000 Nett Births	Number.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1914.	73,230	2,279	2,321	31·7	1,033	14·1	54	263	286	123	1,242	17·0
1915.	Civil 71,617 Total 74,285	2,023	2,050	27·6	1,054	14·7	62	294	292	142	1,285	17·9
1916.	Civil 71,135 Total 77,396	2,047	2,076	26·8	1,101	15·5	80	268	227	109	1,279	18·0
1917.	Civil 68,871 Total 76,772	1,853	1,873	24·4	1,023	14·1	91	281	187	99	1,213	17·6
1918.	Civil 73,500 Total 80,500	1,781	1,810	23·5	1,224	16·6	63	268	210	116	1,429	19·4
1919.	Civil 77,000 Total 80,500	1,860	1,914	23·9	988	12·7	79	245	184	96	1,154	15·0
1920.	80,029	2,285	2,289	28·6	1,000	12·5	59	195	223	97	1,136	14·2
1921.	76,487	2,142	2,068	27·0	817	10·7	43	236	198	96	1,010	13·2
1922.	76,518	2,144	2,051	26·8	877	11·5	42	253	164	80	1,093	14·3
1923.	76,549	2,159	1,999	26·1	858	11·2	50	262	170	85	1,070	14·0
1924.	76,581	2,078	1,942	25·4	799	10·4	59	226	192	99	966	12·6
1925.	76,612	2,077	1,943	25·4	820	10·7	53	324	188	97	1,091	14·2
1926.	76,643	1,958	1,865	24·3	730	9·5	36	311	187	100	1,005	13·1
1927.	76,674	1,916	1,817	23·7	734	9·6	39	339	141	78	1,034	13·5
1928.	76,705	1,793	1,746	22·8	703	9·2	48	379	186	107	1,033	13·5
1929.	76,737	1,668	1,660	21·6	713	9·3	34	414	138	83	1,093	14·2
1930.	76,768	1,774	1,793	23·4	608	7·9	61	394	141	79	941	12·3
1931.	77,160	1,709	1,667	21·6	731	9·5	55	464	159	95	1,140	14·8
1932.	77,260	1,711	1,768	22·9	638	8·3	48	437	152	86	1,027	13·3
1933.	77,210	1,532	1,652	21·4	648	8·4	56	483	146	88	1,075	13·9
1934.	76,800	1,541	1,644	21·4	587	7·6	45	448	126	77	990	12·9
1935.	76,500	1,491	1,636	21·4	568	7·4	46	458	150	92	980	12·8
1936.	76,010	1,318	1,688	22·2	579	7·6	51	509	115	68	1,037	13·6
1937.	74,690	1,142	1,640	22·0	482	6·5	64	535	127	77	953	12·8

* These rates are based on the uncorrected numbers.
Area of District in acres (exclusive of river bed)—1,946·5.

APPENDIX 2.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR 1937.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.											Total Cases Notified in each Locality (e.g., Parish or Ward) of the District.						
	At all Ages.	At Ages—Years.										Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	
		Under One year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45							45-65	Over 65 yrs.
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera-Plague .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Mem- branous Group)	263	4	7	21	20	24	103	50	10	18	5	1	48	26	33	56	39	61
Erysipelas	45	1	1	..	..	..	..	1	4	6	9	19	11	6	4	7	5	12
Scarlet Fever	235	2	9	16	15	22	97	43	14	15	2	..	57	27	15	21	37	78
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	21	..	2	..	..	1	4	2	1	7	2	2	5	1	..	1	5	9
Relapsing Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. ..	..	..	..	..	..	..	..	..	..	7	4	1	..	2	1	..	..	3
Puerperal Pyrexia	11	3	..	..	..	..	..	..	..	..	..	..	1	1	..	2	1	..
Cerebro-spinal Meningitis ..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Polio-myelitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	9	9	..	..	..	..	..	..	..	..	..	..	2	1	1	3	3	1
Infantile Diarrhoea	16	11	5	..	..	..	..	..	..	..	..	..	4	1	1	6	3	1
Influenzal Pneumonia	29	2	3	..	1	2	1	..	1	5	6	5	6	1	2	..	4	16
Acute Primary Pneumonia ..	181	27	24	25	12	15	17	9	7	14	8	17	26	13	16	25	29	72
Trench Fever .. .. .	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Malaria	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Totals	817	59	51	62	49	64	222	105	37	73	37	45	161	80	73	125	126	252

* Voluntary notification of cases under the age of two years during July, August and September.
Isolation Hospital or Hospitals, Sanatoria, etc.:—Corporation Hospital, Linacre Lane, Bootle; Bootle Sanatorium, Maghull.

CAUSES OF DEATH.				NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS IN INSTITUTIONS IN THE DISTRICT	
				All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upward.			
All causes {	Certified	916	123	13	28	20	42	106	244	340	109		
	Uncertified	37	4	..	1	1	1	..	15	15	15		
Enteric Fever				2	..	1	1		
Small-pox		
Measles				4	..	1	2	1		
Scarlet Fever				1	1		
Whooping Cough				8	7	1		
Diphtheria and Croup				14	5	8	..	1	13		
Influenza				19	2	..	1	..	2	3	7	4	..		
Erysipelas		
Phthisis (Pulmonary Tuberculosis)				73	2	..	21	23	21	6	13		
Tuberculous Meningitis				5	1	4	2		
Other Tuberculous Diseases				5	3	2		
Cancer, malignant disease				111	10	51	50	11		
Rheumatic Fever				5	1	1	1	2	..	1		
Meningitis				9	5	1	1	2	..	1		
Organic Heart Disease				133	5	29	99	8		
Bronchitis				47	2	..	1	1	..	4	16	23	1		
Pneumonia (all forms)				132	27	5	7	1	2	13	37	40	7		
Other diseases of respiratory organs				15	2	1	..	2	5	5	3		
Diarrhoea and Enteritis				15	12	1	2	4		
Appendicitis and Typhlitis				3	1	2	..	1		
Cirrhosis of Liver				2	1	..	1	..		
Alcoholism				1	1		
Nephritis and Bright's Disease				26	1	3	6	5	11	6		
Puerperal Fever				3	1	2		
Other accidents and diseases of Preg- nancy and Parturition... ..				3	3	1		
Congenital Debility and Malformation, including Premature Birth				46	45	1	2		
Violent Deaths, excluding Suicide				25	..	2	2	1	7	5	5	3	24		
Suicide				7	3	2	2	..		
Other Defined Diseases				233	25	1	4	1	3	20	69	110	20		
Diseases ill-defined or unknown... ..				6	1	4	1	6		
Totals															

[illegible]

INFANT MORTALITY.

1937. Net Deaths from stated causes at various Ages under One Year of Age.

CAUSES OF DEATH.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and 3 months.	3 months and 6 months.	6 months and 9 months.	9 months and 12 months.	Total Deaths under One Year.
All Causes	{ Certified { Uncertified	39	5	—	2	46	24	27	16	10	123 4
Small-pox	...	—	—	—	—	—	—	—	—	—	—
Chicken-pox	...	—	—	—	—	—	—	—	—	—	—
Measles	...	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	...	—	—	—	—	—	—	—	—	—	—
Whooping Cough	...	—	—	—	—	—	1	3	1	2	7
Diphtheria and Croup	...	—	—	—	—	—	—	—	—	—	—
Erysipelas	...	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	...	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis	...	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	...	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuberculous)	...	—	—	—	—	—	1	1	1	2	5
Convulsions	...	1	1	—	2	4	3	3	1	—	11
Laryngitis	...	—	—	—	—	—	—	—	—	—	—
Bronchitis	...	—	—	—	—	—	—	1	1	—	2
Pneumonia (all forms)	...	—	1	—	1	2	5	9	6	5	27
Diarrhoea	...	—	—	—	—	—	1	—	—	—	1
Enteritis	...	—	—	—	—	—	3	4	3	1	11
Gastritis	...	—	—	—	—	—	—	—	—	—	—
Syphilis	...	—	—	—	—	—	—	—	—	—	—
Rickets	...	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	...	—	—	—	—	—	—	—	—	—	—
Injury at Birth	...	—	—	—	—	—	—	—	—	—	—
Atelectasis	...	—	—	—	—	—	—	—	—	—	—
Congenital Malformations	...	6	—	—	—	6	3	—	—	—	9
Premature Birth	...	26	3	—	—	29	1	—	—	—	30
Atrophy, Debility and Marasmus	...	2	—	—	—	2	3	1	—	—	6
Other Causes	...	4	—	—	—	4	4	7	3	—	18
Totals		39	5	—	3	47	25	29	16	10	127

Net Births in the year { legitimate infants ... 1,577
 { illegitimate infants... 63

Net Deaths in the year { legitimate ... 121
 { illegitimate... 6

APPENDIX 5.

Memo. 37/T. (Revised).
FIRST SCHEDULE.

Form T. 145.

TREATMENT OF TUBERCULOSIS.

RETURN FOR THE YEAR 1937.

(A) Return showing the work of the Dispensary (or Dispensaries).

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts):—														
a) Definitely tuberculous .	39	34	1	3	3	5	13	7	42	39	14	10		105
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	8	11	7	8		34
(c) Non-tuberculous	—	—	—	—	—	—	—	—	49	46	25	13		133
B.—CONTACTS examined during the year:—														
(a) Definitely tuberculous .	—	3	—	—	—	—	—	—	—	3	—	—		3
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	1	5	8	6		20
(c) Non-tuberculous	—	—	—	—	—	—	—	—	14	52	39	59		164
C.—CASES written off the Dispensary Register as:—														
(a) Recovered	3	5	1	3	4	1	4	9	7	6	5	12		30
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	—	—	—	—	—	—	69	113	77	82		341
D.—NUMBER OF CASES on Dispensary Register on December 31st:—														
(a) Definitely tuberculous .	211	127	11	18	20	32	50	48	231	159	61	66		517
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	7	13	12	9		41

1. Number of cases on Dispensary Register on January 1st	583	7. Number of consultations with medical practitioners:—	
		(a) Personal	3
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	14	(b) Other	218
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	67	8. Number of visits by Tuberculosis Officers to homes (including personal Consultations)	12
4. Cases written off during the year as Dead (all causes)	60	9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	2052
5. Number of attendances at the Dispensary (including Contacts)	5429	10. Number of:—	
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	146	(a) Specimens of sputum, etc., examined	508
		(b) X-ray examinations made in connexion with Dispensary work	577
		11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	5
		12. Number of "T.B. plus" cases on Dispensary Register on December 31st	215

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council ... One Provided by Voluntary Bodies ... Nil

APPENDIX 5 (continued).

(C) Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

Name of Institution	For Pulmonary Cases		For Non-Pulmonary Cases		Total
	Adults	Children under 15	Adults	Children under 15	
Linacre Hospital	28	..	...	...	28
Maghull Sanatorium	22	...	...	...	22

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

		In Institutions on Jan. 1st	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st
Number of doubtfully tuberculous cases admitted for observation	Adult males	1	—	1	—	—
	Adult females	2	3	4	—	1
	Children	—	1	1	—	—
	Total	3	4	6	—	1
Number of patients suffering from pulmonary tuberculosis.	Adult males	22	35	33	6	18
	Adult females	4	41	29	6	10
	Children	6	5	8	—	3
	Total	32	81	70	12	31
Number of patients suffering from non-pulmonary tuberculosis.	Adult males	—	3	3	—	—
	Adult females	3	6	9	—	—
	Children	8	12	5	2	13
	Total	11	21	17	2	13
GRAND TOTAL		46	106	93	14	45

APPENDIX 5 (continued).

(E) Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

		In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year	Died in the Institutions.	In Institutions on Dec. 31.
Number of patients suffering from pulmonary tuberculosis.	Adult males	7	52	30	21	8
	Adult females	4	24	19	6	3
	Children	5	4	4	—	5
	Total	16	80	53	27	16
Number of patients suffering from non-pulmonary tuberculosis.	Adult males	1	4	5	—	—
	Adult females	—	10	5	2	3
	Children	8	24	19	2	11
	Total	9	38	29	4	14
GRAND TOTAL		*25	118	82	31	30

*The discrepancy between this column and last year's is occasioned by the admission of two children in the early part of December, 1936, who were not diagnosed as tuberculous until after the completion of the return for that year.

(F) Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation	For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals		
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous...
Non- Tuberculous	1	...	...	...	...	...	...	...	...	1	...	...
Doubtful	1	...		3	...	...	...	...	...	...	1	...	4	1
Totals	1	...	1	3	.	...	...	...	...	...	1	1	4	1

(G) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												Grand Totals.						
		Under 3 months (but over 28 days)			3-6 months.			6-12 months.			More than 12 months.				Totals.					
		M.		F.	M.		F.	M.		F.	M.		F.							
		Ch.	Ch.	Ch.	Ch.	Ch.	Ch.	Ch.	Ch.	Ch.	Ch.	Ch.								
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent	...	...	...	3	—	—	—	—	2	—	—	1	3	—	3	6
		Not Quiescent	...	...	...	2	1	4	—	4	—	—	—	—	7	5	4	16
		Died in Institution	...	...	...	—	—	—	—	—	1	—	—	—	—	—	1	1
	Class T.B. + Group 1.	Quiescent	...	...	...	—	—	—	1	—	—	—	—	—	—	—	1	1
		Not Quiescent	...	...	...	2	1	2	—	—	—	—	—	—	3	3	—	6
		Died in Institution	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. + Group 2.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	...	...	...	3	4	—	3	7	2	—	—	—	8	11	—	19
		Died in Institution	...	...	...	—	—	—	—	—	1	—	—	1	1	1	—	2
	Class T.B. + Group 3.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	...	...	...	2	1	—	1	3	5	3	—	—	11	7	—	18
		Died in Institution	...	...	...	—	—	—	—	1	—	—	1	—	1	1	—	3
Totals (Pulmonary)		8	11	2	10	13	3	12	4	2	4	1	1	34	29	8	71

APPENDIX 5 (continued).

Non-Pulmonary Tuberculosis.													
Bones & Joints.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—
	Not Quiescent	...	...	...	—	1	2	—	—	—	—	2	—
	Died in Institution	...	...	...	—	—	—	—	—	—	—	—	1
Abdominal.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—
	Not Quiescent	...	...	...	—	—	—	—	1	—	—	1	—
	Died in Institution	...	...	...	—	—	—	—	—	—	—	—	—
Other Organs.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—
	Not Quiescent	...	...	...	—	1	—	—	—	—	1	—	1
	Died in Institution	...	...	...	—	—	—	—	—	—	—	—	—
Peripheral Glands.	Quiescent	...	...	...	—	—	—	—	—	—	—	—	—
	Not Quiescent	...	...	...	—	—	—	—	—	1	—	1	2
	Died in Institution	...	...	...	—	—	—	—	—	—	—	—	—
Totals (Non-Pulmonary)					1	1	2	—	—	—	1	4	9

APPENDIX 6.

TUBERCULOSIS SCHEME.

Supplementary Annual Return showing in summary form (a) the condition and (b) the reasons for the removal of all cases written off the Register first entered on the Dispensary Register as definite cases

Condition at the time of the last record made during the year to the return relates.	Previous to 1927					1927.					1928.					1929.					1930					1931											
	Class T.B. +					Class T.B. +					Class T.B. plus					Class T.B. plus					Class T.B. plus					Class T.B. plus											
	Class T.B. minus					Class T.B. minus					Class T.B. minus					Class T.B. minus					Class T.B. minus					Class T.B. minus											
	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)								
(a) Remaining on Dispensary Register on 31st December.	Disease Arrested.		Adults		M	5	4	2	-	6	2	2	-	-	2	2	1	1	-	2	3	1	1	-	2	1	-	1	-	1	-	1	-	1	-	1	-
	Disease not Arrested.		Adults		F	1	1	1	-	2	-	-	-	-	-	-	1	1	-	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	Disease not Arrested.		C'dren		M.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Disease not Arrested.		C'dren		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Condition not ascertained during the year		Adults		M.	4	6	9	1	16	2	1	1	-	2	2	3	2	1	6	1	-	1	-	1	-	-	3	-	-	-	-	-	-	-	-	-
	Condition not ascertained during the year		Adults		F	4	1	2	1	4	2	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
	Condition not ascertained during the year		C'dren		M.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Condition not ascertained during the year		C'dren		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total on Dispensary Register-at 31st Dec.		Total			17	12	14	3	29	6	3	1	-	4	7	5	4	1	10	5	1	3	-	4	4	-	9	-	9	8	1	5	-	-	-	-
	(b) Not now on Dispensary Register and reasons for removal therefrom.	Discharged as Recovered.		Adults		M	20	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	-	1	-	-	-
Discharged as Recovered.		Adults		F	44	3	-	-	-	4	-	-	-	-	2	-	1	-	1	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
Discharged as Recovered.		C'dren		M	30	3	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Discharged as Recovered.		C'dren		F	30	3	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lost sight of or otherwise removed from Dispensary Register.		Adults		M	228	16	4	6	2	12	18	3	11	1	15	14	3	7	2	12	16	2	7	7	16	28	4	7	4	1	1	1	1	1	1	1	
Lost sight of or otherwise removed from Dispensary Register.		Adults		F	135	5	2	7	10	19	9	3	14	12	29	10	4	17	8	29	10	-	12	11	23	9	2	10	16	2	2	2	2	2	2	2	
Lost sight of or otherwise removed from Dispensary Register.		C'dren		M	75	2	-	10	11	21	9	-	10	4	14	5	2	6	6	14	5	-	10	6	16	6	-	7	6	1	1	1	1	1	1	1	
Lost sight of or otherwise removed from Dispensary Register.		C'dren		F	9	1	-	-	3	3	4	1	-	1	2	1	1	1	1	3	2	-	1	2	3	4	-	-	2	-	-	-	-	-	-	-	
Totals written off Dispensary Register.		Totals			541	31	6	23	26	55	47	7	35	18	60	34	10	32	17	59	36	2	31	26	59	52	6	25	28	5	5	5	5	5	5	5	
Grand Totals ..		Grand Totals			587	37	9	24	26	59	54	12	39	19	70	39	11	35	17	63	40	2	40	26	68	60	7	30	28	6	6	6	6	6	6	6	

PULMONARY TUBERCULOSIS.

At the end of 1937 of all patients remaining on the Dispensary Register; The Table is arranged according to the years in which the patients were diagnosed as having pulmonary tuberculosis, and their classification at that time.

1932.					1933.					1934.					1935.					1936.					1937.				
Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus			
	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)
-	-	1	-	1	2	-	2	-	2	2	1	3	-	4	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
1	-	1	-	1	1	2	-	-	2	4	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	3	-	3	1	2	6	2	10	4	1	6	3	10	4	1	14	6	21	21	1	8	6	15	12	1	10	8	19
2	-	1	1	2	3	4	1	-	5	3	1	8	-	9	7	4	4	-	8	5	3	1	2	6	9	4	11	7	22
2	-	-	-	-	-	-	1	1	2	-	-	1	-	1	2	2	-	-	2	4	-	1	1	2	3	-	1	-	1
-	-	-	-	-	1	-	-	-	-	5	-	2	-	2	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-
9	-	6	1	7	9	8	10	3	21	18	4	20	3	27	14	8	19	6	33	31	4	10	9	23	24	5	22	15	42
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	2	9	3	14	13	5	9	3	17	9	3	10	2	15	4	2	5	3	10	5	1	8	1	10	1	-	2	2	4
4	-	10	8	18	7	-	7	14	21	3	-	12	15	27	3	1	8	18	27	4	-	1	4	5	5	-	-	2	2
7	-	5	13	18	4	-	6	5	11	7	1	9	4	14	-	-	8	12	20	4	1	2	5	8	5	-	-	1	1
-	1	1	-	2	1	-	1	-	1	-	1	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	3	25	24	52	25	5	23	22	50	19	5	31	22	58	7	3	21	33	57	13	2	11	10	23	11	-	2	5	7
32	3	31	25	59	34	13	33	25	71	37	9	51	25	85	21	11	40	39	90	44	6	21	19	46	35	5	24	20	49

TUBERCULOSIS SCHEME.—

Supplementary Annual Return showing in summary form (a) the conditions
(b) the reasons for the removal of

[illegible]

NON-PULMONARY TUBERCULOSIS.

at the end of 1937 of all patients remaining on the Dispensary Register; and all cases written off the Register.

1932.					1933.					1934.					1935.					1936.					1937.				
Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
-	-	-	-	-	1	-	-	-	1	1	-	-	1	2	-	-	-	-	-	1	-	-	-	3	-	-	-	-	-
-	1	-	-	1	1	-	-	-	1	1	-	-	1	2	-	1	-	-	1	1	-	-	-	1	1	-	-	2	2
1	-	-	3	4	5	1	-	4	10	1	1	-	10	12	2	1	-	10	13	-	-	-	8	8	-	-	-	8	8
-	-	-	-	-	-	-	1	-	1	1	-	-	-	1	2	-	1	-	3	1	-	-	-	1	1	1	-	2	4
-	-	1	1	2	-	1	-	-	1	-	-	-	1	1	1	1	-	-	2	2	-	-	1	3	1	-	-	3	4
-	-	-	-	-	2	-	-	-	2	3	1	-	2	6	-	-	-	1	1	2	-	-	4	6	2	1	-	12	15
-	-	-	-	-	-	-	-	1	1	2	-	1	-	3	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-
1	1	1	4	7	9	2	1	5	17	9	2	1	15	27	5	3	1	12	21	6	-	2	15	23	4	1	1	27	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	1	1	1	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	1	-	6	8	-	1	1	7	9	-	-	-	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	7	12	3	1	-	13	17	2	-	-	4	6	1	1	-	-	2	-	-	-	2	2	-	-	-	-	-
3	-	-	-	3	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	1	1	-	3	-	1	1	-	2	-	-	1	-	1	-	-	-	-	-	1	1	-	-	2	-	-	1	1	
4	-	-	1	5	-	-	-	-	-	1	1	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
15	2	1	14	32	6	4	2	21	33	3	1	2	10	16	1	1	-	-	2	1	1	-	2	4	-	-	1	1	2
16	3	2	18	39	15	6	3	26	50	12	3	3	25	43	6	4	1	12	23	7	1	2	17	27	4	1	2	28	35

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.
Form T. 137/1937.

PART I.—Summary of Notifications during the period from the 1st January 1937, to the 31st December 1937, in the area of the County Borough of Bootle.

Formal Notifications														
AGE-PERIODS		Number of Primary Notifications of new cases of Tuberculosis.											Total (all ages)	Total Notifications
		0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards		
Pulmonary, Males ...		1	1	..	1	7	5	15	11	15	10	1	67	88
" Females ...		2	..	1	3	14	8	15	6	5	2	3	59	73
Non-pulmonary, Males ...		..	3	8	6	..	2	2	2	1	..	..	24	30
" Females ...		..	1	6	4	3	2	8	..	..	..	..	24	28

SUPPLEMENTAL RETURN.

PART II.—New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

AGE PERIODS	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males	1	1	..	..	..	1	1	2	..	2	8
" Females	1	1	..	..	1	4	..	1	1	..	9
Non-pulmonary Males	1	1	..	..	..	1	..	..	..	..	3
" Females	2	1	1	1	1	..	..	1	..	7

APPENDIX 7 (continued).

The source or sources from which information as to the above-mentioned cases was obtained is stated below:—

SOURCE OF INFORMATION.	No. of Cases.	
	Pulmonary.	Non-Pulmonary.
Death Returns—From Local Registrars ...	5	1
" Transferable Deaths from Registrar-General...	...	1
Posthumous notifications ...	2	3
"Transfers" from other areas (other than transferable deaths)	10	5
Other sources, if any.	...	...

PART III.

NOTIFICATION REGISTER.

	Pulmonary.		Non-Pulmonary.			Total Cases
	Males	Females	Total	Males	Females	Total
Number of cases of Tuberculosis remaining at the 31st December, 1937, on the Registers of Notifications kept by the Medical Officer of Health of the County Borough ...	292	238	530	117	141	258
Number of cases removed from the Registers during the year by reason of—						
1. Withdrawal of notification ...	...	8	...	...	...	...
2. Recovery from the disease ...	4	40	12	8	10	30
3. Death (all causes) ...	46	37	86	3	8	11
4. Otherwise ...	46	37	83	14	19	97
						116

APPENDIX 8.

SUMMARY OF WORK DONE BY SANITARY INSPECTORS.

NUISANCES—

No. of complaints	...	...	...	...	...	...	...	...	1406
No. of complaints confirmed	...	...	...	...	...	...	...	...	1352
No. of nuisances discovered on above complaints	...	...	...	...	...	...	...	...	3059
No. of nuisances discovered excluding on complaint	...	...	...	...	...	...	...	...	1625
No. of re-inspections of nuisances	...	...	...	...	...	...	...	...	11710
No. of special visits and miscellaneous visits	...	...	...	...	...	...	...	...	1338
No. of informal notices served	...	...	...	...	...	...	...	...	1860
No. of statutory notices served	...	...	...	...	...	...	...	...	427
Matters referred to the Borough Engineer	...	...	...	...	...	...	...	...	387
Matters referred to the Water Engineer, Liverpool	...	...	...	...	...	...	...	...	32
Matters referred to the Housing Manager	...	...	...	...	...	...	...	...	40
No. of drains tested	...	...	...	...	...	...	...	...	96
No. of drains re-constructed	...	...	...	...	...	...	...	...	20
No. of drains repaired	...	...	...	...	...	...	...	...	106
No. of drains cleared	...	...	...	...	...	...	...	...	218
No. of ventilating shafts provided or repaired	...	...	...	...	...	...	...	...	20
No. of new gullies fixed	...	...	...	...	...	...	...	...	26
No. of new sinks and wastes provided	...	...	...	...	...	...	...	...	40
No. of water closets repaired	...	...	...	...	...	...	...	...	305
No. of water closet basins renewed	...	...	...	...	...	...	...	...	43
No. of lavatory basins and waste pipes renewed	...	...	...	...	...	...	...	...	29
No. of waste pipes to lavatory basins, sinks and baths repaired	...	...	...	...	...	...	...	...	45
No. of roofs repaired	...	...	...	...	...	...	...	...	313
No. of eaves gutters repaired or renewed	...	...	...	...	...	...	...	...	148
No. of downspouts repaired or renewed	...	...	...	...	...	...	...	...	72
No. of yard surfaces repaired or repaved	...	...	...	...	...	...	...	...	246
No. of dustbins renewed	...	...	...	...	...	...	...	...	276
No. of cases of dampness remedied	...	...	...	...	...	...	...	...	129
No. of general repairs to houses	...	...	...	...	...	...	...	...	1653
Dirty conditions	...	...	...	...	...	...	...	...	17
Removal of fowl and other animals	...	...	...	...	...	...	...	...	2
Accumulations	...	...	...	...	...	...	...	...	8
Unsuitable storage	...	...	...	...	...	...	...	...	1
Miscellaneous	...	...	...	...	...	...	...	...	4

PLACES OF PUBLIC ENTERTAINMENT—

There are 6 buildings used for public entertainment in the town. There were 70 visits of inspection.

HOUSING ACTS—

Howe Street Improvement Area—Re-inspections	...	...	...	...	...	...	...	144
Miller's Bridge Improvement Area No. 1—Re-inspections	...	...	...	...	...	...	...	200
Miller's Bridge Improvement Area No. 2	...	...	...	...	...	...	...	52
Housing Act, 1936, Section 9—								
Number of houses inspected	...	...	...	...	...	...	...	249
Informal notices served	...	...	...	...	...	...	...	249
Informal notices complied with	...	...	...	...	...	...	...	251
Number of houses where work is in progress at end of year	...	...	...	...	...	...	...	171
Statutory notices served	...	...	...	...	...	...	...	13
Statutory notices complied with	...	...	...	...	...	...	...	9
Number of inspections and re-inspections made	...	...	...	...	...	...	...	3267

COMMON LODGING HOUSES—

No. registered under the Public Health Act, 1875	...	...	...	...	...	...	...	4
No. of inspections	...	...	...	...	...	...	...	208
No. of informations laid in respect of infringements	...	...	...	...	...	...	...	—

CANAL BOATS—

No. of inspections and re-inspections of canal boats	...	...	...	...	...	...	...	107
„ infringements re certificates	...	...	...	...	...	...	...	2
„ infringements re cleanliness	...	...	...	...	...	...	...	—
„ infringements re ventilation	...	...	...	...	...	...	...	—
„ other defects	...	...	...	...	...	...	...	—
„ notices sent	...	...	...	...	...	...	...	1
„ defects or infringements where necessary work was done without service of notice	...	...	...	...	...	...	...	1

STEPS TAKEN TO PREVENT NUISANCE FROM SMOKE—

No. of observations made	...	...	...	...	...	...	...	...	...	37
„ intimations sent	...	...	...	...	...	...	...	...	...	7
„ notices served in respect of excessive black smoke	...	...	...	...	...	...	...	...	...	—
„ informations laid	...	...	...	...	...	...	...	...	...	—
Amount of fines and costs	...	...	...	...	...	...	...	...	...	—

DAIRIES, COWSHEDS, AND MILKSHOPS—

No. of cowkeepers and dairymen resident in the borough on register	...	...	...	...	...	...	...	...	...	15
„ milk purveyors (not cowkeepers) resident in the borough on register	...	...	...	...	...	...	...	...	...	42
„ milk purveyors resident outside the borough on register	...	...	...	...	...	...	...	...	...	24
„ premises registered as cowsheds or dairies or milkshops	...	...	...	...	...	...	...	...	...	57
„ registered retail purveyors of bottled milk only	...	...	...	...	...	...	...	...	...	83
„ inspections made—cowsheds 162, dairies and milkshops 274	...	...	...	...	...	...	...	...	...	436

PIGGERIES—

No. of premises	...	...	...	...	...	...	...	...	...	4
„ visits	...	...	...	...	...	...	...	...	...	142

STABLES—

No. of visits	18
---------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

RATS AND MICE (DESTRUCTION) ACT—

No. of visits re infestation	119
------------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FOOD INSPECTION—

No. of visits to butchers' shops	...	...	...	...	...	...	...	...	...	716
„ „ fishmongers' shops	...	...	...	...	...	...	...	...	...	101
„ „ fried fish shops	...	...	...	...	...	...	...	...	...	92
„ „ dining rooms and kitchens	...	...	...	...	...	...	...	...	...	58
„ „ grocers' shops	...	...	...	...	...	...	...	...	...	142
„ „ fruiterers' shops	...	...	...	...	...	...	...	...	...	110
„ „ cold stores	...	...	...	...	...	...	...	...	...	33
„ „ ice cream premises	...	...	...	...	...	...	...	...	...	79
„ „ respecting observation of Merchandise Marks Acts	...	...	...	...	...	...	...	...	...	514

SUMMARY OF LEGAL PROCEEDINGS—

Food and Drugs (Adulteration) Act, 1928, Sec. 2	1
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	---

DISINFECTION: INFECTIOUS DISEASES—

No. of houses disinfected after notifiable infectious diseases	...	...	...	...	...	...	...	...	...	474
„ „ „ „ pulmonary tuberculosis	...	...	...	...	...	...	...	...	...	135
„ „ „ „ other diseases	...	...	...	...	...	...	...	...	...	21
„ „ „ „ cleaned in default of, or at request of, owners	...	...	...	...	...	...	...	...	...	13

All houses assessed at £15 per annum or less are cleaned after infectious diseases i.e., the walls stripped and the ceilings whitened) by the Corporation at their own cost; in cases of pulmonary tuberculosis the Corporation strip, when necessary, whatever the rent.

LIST OF ARTICLES DISINFECTED—

Paillasses	...	...	...	...	...	...	...	...	...	189
Mattresses	...	...	...	...	...	...	...	...	...	8
Beds	...	...	...	...	...	...	...	...	...	288
Bolsters and Pillows	...	...	...	...	...	...	...	...	...	1158
Blankets	...	...	...	...	...	...	...	...	...	981
Quilts	...	...	...	...	...	...	...	...	...	567
Sheets	...	...	...	...	...	...	...	...	...	591
Carpets	...	...	...	...	...	...	...	...	...	7
Hearthrugs	...	...	...	...	...	...	...	...	...	17
Wearing Apparel	...	...	...	...	...	...	...	...	...	1298
Miscellaneous Articles	...	...	...	...	...	...	...	...	...	310

5414

The figures in the table do not include the ambulance bedding (one bed, one pillow and three blankets), which is disinfected after the removal of each case.

On hundred and ninety books were disinfected.

Thirty-four articles were destroyed at the request of the owners.

BUG INFESTATION—

Number of houses fumigated (Corporation 89, Private 46)	135
Number of vanloads of furniture treated with hydrogen-cyanide	140

FACTORY AND WORKSHOP ACT.

WORKSHOPS AND WORKPLACES (excluding Bakehouses)—

No. on register	91
No. of visits and re-visits	321
„ workrooms with dirty walls or ceilings	9
„ miscellaneous defects found	18
„ notices issued to occupiers	19
„ notices issued to owners	1
„ notices complied with	19
„ references to the Factory Inspector	—
„ „ „ Borough Engineer	—

FACTORIES—

No. of visits and re-visits	233
No. with insufficient or unsuitable sanitary accommodation	2
No. of insufficient drainage of floors	—
„ defective drains and water closets	—
„ cases of uncleanness	11
„ miscellaneous defects found	9
„ defects remedied	22
„ written notices	—

BAKEHOUSES—

No. on register	20
No. of visits and re-visits	76
„ bakehouses found dirty (walls, ceilings and floors)	9
„ notices issued for limewashing	9
„ notices issued for miscellaneous defects	11
„ bakehouses taken off the register during the year	—
„ bakehouses added to the register during the year	2

CONFECTIONERY BAKEHOUSES—

No. on register at end of year	22
No. taken off register during the year	—
No. added to register during the year	—
No. of visits and re-visits	50
No. found dirty (walls, ceilings and floors)	4
No. of notices issued for limewashing	4
„ „ „ miscellaneous defects	3

OUTWORKERS—

No. of outworkers on register at end of year	1
„ visits and re-visits made to houses of out-workers	8
„ notices served for sanitary defects at houses of out-workers	—
Outworker employed in Litherland for Bootle firm :—	
Hosiery	1

APPENDIX 9.

PUBLIC HEALTH ACT, 1936—SECTION 343.

CONDITIONS IN OFFICES.

No. of Premises visited.	No. of Separate Rooms inspected.	No. of Rooms found to be overcrowded on basis of 250 cu. ft. per person.	Ventilation.		Lighting.		Cleanliness.		Heating.		Washing Facilities.		Sanitary Accommodation.	
			Satisfactory (through)	Unsatisfactory (no ventilation).	Natural, satisfactory.	Artificial, satisfactory.	Natural, not satisfactory, but sufficient with artificial.	Clean.	Not clean.	Satisfactory provision, (fire, stove, or radiator).	No provision made.	Provision of wash hand basin, etc.	Satisfactory provision of water closet where one sex only employed.	Satisfactory provision of separate water closet for sexes.
114	317	—	311	6	312	317	5	317	—	313	4	108	49	64
														1

NOTE.—The standard of sufficiency as applied to sanitary accommodation is as follows :—

Where one sex only is employed, not more than 12 persons to one water closet, and adequate urinal accommodation for males.

Where both sexes are employed, not more than 6 persons to one water closet, and adequate urinal accommodation for males.

APPENDIX 10.
FOOD AND DRUGS (ADULTERATION) ACT, 1928.

SAMPLES TAKEN DURING THE YEAR 1937.

Nature of Article	Total.	Number of Samples taken for Analysis.		Number found Adulterated or not up to Standard.	
		Informal	Formal	Informal	Formal
Anchovy Paste	1	1	...	...	..
Butter	21	21	...	...	...
Beef Suet with Rice Flour	1	1	...	...	...
Blackpudding	1	1	...	...	...
Baking Powder	1	1	...	..	...
Barley	1	1	...	...	..
Blancmange Powder	1	1	...	..	...
Cheese and Wrapped Cheese	9	9	...	...	...
Cocoa	6	6	...	...	...
Custard Powder	2	2	...	...	...
Cornflour	2	2	...	...	..
Coffee	3	3	...	...	...
Condensed Milk	10	10	...	..	...
Dripping	1	1	...	...	...
Egg Substitute Powder	1	1	...	...	...
Flour—Self-Raising	4	4	...	...	..
Ground Almonds	2	2	...	...	...
Honey	1	1	...	...	...
Jelly	2	2	...	...	...
Jam	4	4	...	2	...
Lard	5	5	...	...	...
Lemon Cheese and Curd	3	3	...	...	...
Milk	128	114	14	10	4
Margarine	19	19	...	...	..
Meat Paste	1	1	...	1	...
Mince Meat	1	1	...	...	...
Meat Pie	2	2	...	...	...
Olive Oil	2	2	...	..	...
Orangeade Powder	1	1	...	...	...
Pepper	2	2	...	...	...
Pickles	1	1	...	...	...
Rice	3	3	...	...	...
Sausage	6	6	...	1	...
Syrup	2	2	...	...	...
Salmon Paste	1	1	..	...	...
Sauce	1	1	...	...	...
Tinned Cream	2	2	...	...	...
Tinned Peas	3	3	...	...	...
Tinned Sild	2	2	...	...	...
Tinned Fruit	1	1	...	...	...
Tinned Kipperd Herring	1	1	...	...	..
Tea	5	5	...	...	...
Tapioca	1	1	...	...	...
Treacle	1	1	...	...	..
Vinegar	1	1	...	...	...
Yeast	1	1	...	...	...
Totals	270	256	14	14	4

APPENDIX 11.

THE PUBLIC HEALTH (PRESERVATIVES IN FOOD)
REGULATIONS, 1925-1927.

Year 1937.

Nature of Article.	Number of samples examined for preservative.	Number of samples found correct.
Anchovy Paste	1	1
Blackpudding	1	1
Butter	21	21
Barley	1	1
Blancmange Powder	1	1
Custard Powder	2	2
Cornflour	2	2
Condensed Milk	10	10
Honey	1	1
Jam	4	3
Jelly	2	2
Lemon Cheese and Curd	2	2
Lemon Cheese	1	1
Meat Paste	1	—
Mince Meat	1	1
Milk	128	128
Margarine	19	19
Meat Pie	2	2
Orangeade Powder	1	1
Pepper	2	2
Pickles	1	1
Sauce	1	1
Sausages	6	5
Syrup	2	2
Salmon Paste	1	1
Tapioca	1	1
Treacle	1	1
Tinned Cream	2	2
Totals	218	215

APPENDIX 12.

RETURN relating to all persons who were treated at the TREATMENT CENTRE at
BOOTLE GENERAL HOSPITAL during the year ended the 31st December 1937.

	Syphilis.		Soft Chancere.		Gonor- rhoea		Conditions other than venereal.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals.
1. Number of cases on 1st January under treatment or observation.	73	22	1	—	192	41	15	5	281	68	349
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	8	4	—	—	25	3	—	—	33	7	40
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:											
Syphilis, primary	16	1	—	—	—	—	—	—	16	1	17
" secondary	18	3	—	—	—	—	—	—	18	3	21
" latent in 1st year of infection	2	—	—	—	—	—	—	—	2	—	2
" all later stages	7	5	—	—	—	—	—	—	7	5	12
" congenital	1	5	—	—	—	—	—	—	1	5	6
Soft Chancre	—	—	22	—	—	—	—	—	22	—	22
Gonorrhoea, 1st year of infection	—	—	—	—	137	23	—	—	137	23	160
Gonorrhoea, later	—	—	—	—	18	8	—	—	18	8	26
Conditions other than venereal	—	—	—	—	—	—	41	14	41	14	55
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres ...	12	—	1	—	10	—	—	—	23	—	23
TOTALS OF ITEMS 1, 2, 3 & 4.	137	40	24	—	382	75	56	19	599	134	733
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal ...	9	6	7	—	38	8	46	13	100	27	127
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—											
Syphilis, primary	2	—	—	—	—	—	—	—	2	—	2
" secondary	12	—	—	—	—	—	—	—	12	—	12
" latent in 1st year of infection	3	—	—	—	—	—	—	—	3	—	3
" all later stages	4	2	—	—	—	—	—	—	4	2	6
" congenital	—	1	—	—	—	—	—	—	—	1	1
Soft Chancre	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea, 1st year of infection	—	—	—	—	61	2	—	—	61	2	63
Gonorrhoea, later	—	—	—	—	15	3	—	—	15	3	18
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	6	6	—	—	14	22	—	—	20	28	48
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	30	—	12	—	53	1	—	—	95	1	96
9. Number of cases remaining under treatment or observation on 31st December	71	25	5	—	201	39	10	6	287	70	357
TOTALS OF ITEMS 5, 6, 7, 8 & 9.	137	40	24	—	382	75	56	19	599	134	733

(These totals should agree with those of Items 1, 2, 8 and 4)

APPENDIX 12 (continued).

	Syphilis.		Soft Chancere.		Gonorrhoea.		Conditions other than venereal.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals.
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment:											
Syphilis, primary	—	—	—	—	—	—	—	—	—	—	—
,, secondary	6	—	—	—	—	—	—	—	6	—	6
,, latent in 1st year of infection	2	—	—	—	—	—	—	—	2	—	2
,, all later stages	3	—	—	—	—	—	—	—	3	—	3
,, congenital	—	1	—	—	—	—	—	—	—	1	1
11. Number of attendances:—											
(a) for individual attention of the medical officers	2294	422	230	—	5164	660	343	51	8031	1133	9164
(b) for intermediate treatment, e.g., irrigation, dressing	—	—	—	—	3537	—	—	—	3537	—	3537
TOTAL ATTENDANCES	2294	422	230	—	8701	660	343	51	11568	1133	12701
12. In-patients:—											
(a) Total number of persons admitted for treatment during the year	3	2	1	—	5	6	—	—	9	8	17
(b) Aggregate number of "in-patient days" of treatment given	226	48	11	—	196	175	—	—	433	223	656
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods ...	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals.
...	1	—	—	1	—	2	—	2	1	5	
Arsenical.											
14. (a) Names of chief preparations used in the treatment of syphilis	Approved Arsenobenzene Compounds.				Others.		Mercury.		Bismuth.		
	Neo-Kharsivan Kharsulphan				—		Mercolloid		Bisglugol and Bismuth Metal		
(b) Total number of injections given (out-patients and in-patients)	905				—		—		585		

APPENDIX 12 (*continued*).

	Microscopical		Cultural for Gonor- rhea	Serum		Cerebro- spinal fluid	Others for diagnosis of Venereal Disease
	for Syphilis	for Gonor- rhea		for Syphilis	for Gonor- rhea		
15. Pathological Work:—							
(a) Number of specimens ex- amined at and by the medi- cal officer of the treatment centre	15	233	—	—	—	—	—
(b) Number of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory	—	213	—	234	—	—	—

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

	Bootle.		Liverpool.		Lancashire.		Various.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	
A. Number of cases from each area included under the following headings in Item 3:—									
Syphilis	7	4	2	3	10	7	25	—	58
Soft Chancre	5	—	2	—	4	—	11	—	22
Gonorrhoea	56	20	28	5	36	6	35	—	186
Conditions other than vener- eal	14	11	6	1	9	2	12	—	55
TOTAL ...	82	35	38	9	59	15	83	—	321
B. Total number of attendances of all patients residing in each area	5550	732	2662	221	2977	180	379	—	12701
C. Aggregate number of "In- patient days" of all patients residing in each area	11	175	56	—	110	48	256	—	656

W. L. WEBB, M.B., Ch.B.,
RUTH NICHOLSON,

9th February, 1938.

Medical Officers of the Treatment Centre.

APPENDIX 13.
VENEREAL DISEASES.

Annual Return of Pathological Examinations made during the year ended on the
31st December, 1937:—

At the University of Liverpool—

Nature of Test.	Number of tests in respect of patients under care of:—		
	Treatment Centres.	Hospitals and other Institu- tions.	General Practitioners.
Microscopical— For detection of gonococci	213	—	10
Serum Tests— For Wassermann reaction	234	131	7
Cerebro-spinal Fluid Tests— For Wassermann reaction	—	1	—
Totals	447	132	17

APPENDIX 14.
WORK DONE BY THE WELFARE VISITORS.

Total visits paid	19490
First visits to infants	1637
Routine visits to infants	6152
Visits to children, aged 1 to 2 years	3725
Visits to children, aged 2 to 5 years	5556
First visits to expectant mothers	577
Routine visits to expectant mothers	738
Ophthalmia Neonatorum—First Visits	6
„ „ Routine Visits	5
Special visits to cases of Diarrhoea	18
„ „ Measles	128
Visits re Still-births	45
Visits re deaths from Cancer	4
„ cases of Pneumonia	150

APPENDIX 15.

ANTE-NATAL CLINICS.

JANUARY 1st TO DECEMBER 31st, 1937.

Number of times Clinics opened	196
Number of attendances made	4186
Number of new cases	940
Number of patients under supervision at end of 1936	235
Normal labour	460
Stillbirth	17
Miscarriage	11
Difficult labour	30
Not pregnant	32
Left the district	30
Post-natal Cases	7
Referred to Hospital or Maternity Home (including 4 of Caesarian Section)	326
Number under supervision at end of 1937	262
Wasserman—	
Positive	1
Negative	2
Smears taken for Gonococci—	
Positive	—
Negative	—

RETURN to be made on or before the 14th of February, 1938, by Mr. N. Lockwood, Vaccination Officer of the Bootle Registration District, respecting the Vaccination of Children whose births were registered from 1st January to 31st December 1936, inclusive.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Number of Births returned in the "Births List Sheets," as regis- tered from 1st Jan., to 31st Dec. 1936.	Number of these Births duly entered by 31st January, 1938, in Columns I., II., IV. and V. of the "Vaccination Regis- ter" (Birth List Sheets), viz. :						Number of these Births which on 31st January, 1938, remained un- entered in the "Vaccination Register" on account (as shown by "Report Book") of				Number of these Births remaining on 31st January, 1938, neither duly entered in the "Vaccination Register" (columns 3, 4, 5, 6 and 7 of this Return) nor temporar- ily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return.	*Total number of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1937.	Number of Statutory Declarations of Conscien- tious Objection received by the Vaccina- tion Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year 1937.
		Col. I. Success- fully Vaccin- ated.	Col. II.		Col. V. Col. V.	Postpone- ment by Medical Certi- ficate	Removal to Districts the Vaccina- tion Officers of which have been duly apprised.	Removal to places unknown, or which cannot be reached, and Cases not hav- ing been found.						
			Insue- ceptible of Vac- cination.	Had Small Pox.					Col. IV. Number in re- spect of whom Statu- tory Declara- tions of Con- scien- tious Objection have been received.					
1	2	3	4	5	6	7	8	9	10	11	12	13		
BOOTLE ...	1317	1016	16	—	182	53	2	16	19	13	1532	113		
Total ...	1317	1016	16	—	182	53	2	16	19	13	1532	113		

8th February 1938.

N. LOCKWOOD, Vaccination Officer.

NOTE.—The total of the figures in columns 3 to 11 should agree with the figure in column 2. Any cases of children successfully vaccinated after the declaration of conscientious objection had been made should be included in column 6 above and not in column 3. The number of such cases should be inserted here:—Nil.

*The total in this column should be the number of Certificates of successful primary vaccination of children under 14, actually received during the year, including any relating to births registered in previous years. The total thus given should include the Certificates of successful primary vaccination, of which copies have been sent to Vaccination Officers of other Districts. The total number of Certificates for the year 1937 sent to other Vaccination Officers should be stated here:—474.

APPENDIX 17.

LINACRE HOSPITAL.—REVISED DIAGNOSES AND COMPLICATIONS.

SCARLET FEVER ADMISSIONS.	Bootle	Lith- land	Form- by	DIPHtheria ADMISSIONS.	Bootle	Lith- land	Form- by
Re-diagnosed as:—				Re-diagnosed as:—			
Scarlet Fever and chickenpox	1	1	—	Diphtheria and chickenpox	1	—	—
" " and enteric fever	1	—	—	" " and pertussis	3	—	—
" " and fractured leg	1	—	—	Adenitis	1	—	—
" " and mumps	2	1	—	Burns	1	—	—
Chickenpox	1	—	—	Chickenpox	1	—	—
Diphtheria	1	—	—	Laryngitis	3	1	—
Erythema	2	—	—	Lobar Pneumonia	—	1	—
Febricula	3	—	—	Mumps	1	—	—
Lobar Pneumonia	1	—	—	Nil	1	1	—
Measles	—	1	—	Pertussis	—	2	—
Rubella	3	—	—	Quinsy	2	—	—
Tonsillitis	4	—	—	Tonsillitis	51	10	2
				Scarlet Fever	6	—	—
				Vincent's Angina	1	—	—
Totals	20	3	—	Totals	72	15	2

APPENDIX 18.

METEOROLOGICAL DATA FOR YEAR 1937.

Supplied by the Liverpool Observatory and Tidal Institute.

Month.	Mean Barometer.	Mean Temperature.	Rainfall.	Mean Cloud.
January ...	29·698 ins.	42·0°	1·862 ins.	8·0
February ...	29·517 ins.	42·0°	4·457 ins.	7·9
March	29·656 ins.	38·6°	1·311 ins.	7·9
April	29·830 ins.	48·0°	2·819 ins.	7·9
May	30·002 ins.	53·1°	3·437 ins.	6·9
June	30·047 ins.	56·1°	1·814 ins.	7·3
July	29·964 ins.	59·8°	1·555 ins.	7·9
August ...	30·067 ins.	62·0°	1·626 ins.	7·1
September ...	29·897 ins.	56·4°	2·094 ins.	6·6
October ...	29·977 ins.	51·1°	2·303 ins.	8·2
November ...	30·047 ins.	43·9°	1·484 ins.	7·5
December ...	29·880 ins.	38·9°	2·894 ins.	7·9
Year	29·882 ins.	49·3°	27·656 ins.	7·6

APPENDIX 19.

LOCAL POWERS RELATING TO PUBLIC HEALTH.

		Dates provisions became operative.	
(1) ACTS OF PARLIAMENT ADOPTED BY THE COUNCIL.			
Infectious Disease (Prevention) Act, 1890, sections 4, 16, 18, 21	11	Oct.,	1893
Public Health Acts Amendment Act 1890, sections 28, 29, 30, 31, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 and 50 ...	11	Oct.,	1893
Public Health Acts Amendment Act, 1907, section 95 ...	11	Dec.,	1908
Public Health Acts Amendment Act, 1907, sections 22, 33, 53 and 54 ...	20	Feb.,	1915
Public Health Act, 1925, sections 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33 and 35 ...	1	Dec.,	1926
(2) BOOTLE CORPORATION ACTS AND ORDERS—			
Bootle Corporation Act, 1890 ...	1	Sept.,	1890
Bootle Order, 1897; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 16) Act, 1897, relative to Sanitary Improvements ...	24	Mar.,	1897
Bootle Corporation Act, 1899 ...	8	Aug.,	1899
Bootle Corporation Act, 1905 ...	9	Nov.,	1905
Bootle Order, 1914; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 6) Act, 1914, relating to the substitution of moveable ashpits for fixed ashpits ...	13	Mar.,	1914
Bootle Corporation Act, 1920 ...	31	Mar.,	1921
Bootle Order, 1927; confirmed by the Ministry of Health's Provisional Orders Confirmation (No 4) Act, 1927, relating to the substitution of ashbins for ashpits ...	24	Mar.,	1927
Bootle Corporation Act, 1930 ...	1	Aug.,	1930
(3) BYE-LAWS AND REGULATIONS IN FORCE IN THE BOROUGH--			
Slaughter Houses, 1887 ...	26	May,	1887
Nuisances, 1887 ...	7	Nov.,	1887
Common Lodging Houses, 1894 ...	25	June,	1894
Carriage of Offensive Matter through Streets, 1898 ...	26	July,	1898
Hospitals provided by the Corporation, 1904 ...	10	June,	1904
New Streets and Buildings, 1927 ...	31	Oct.,	1927
Removal of Refuse from Premises and the Cleaning of Privies, etc. (Repeal of former Bye-laws) ...	16	Dec.,	1929
Smoke Abatement Bye-laws, 1930 ...	15	Dec.,	1930
Houses let in Lodgings, or occupied by members of more than one family ...	19	May,	1931
Nursing Homes ...	10	Dec.,	1931
New Buildings ...	21	April,	1932
Howe Street Improvement Area ...	21	Sept.,	1932
Miller's Bridge Improvement Area ...	1	Oct.,	1934
Howe Street Improvement Area ...	1	Oct.,	1934

